# An Address
ON
# THE OPERATIVE TREATMENT OF VARICOSE VEINS:
## A RECORD OF 50 CASES OF TRENDELENBURG'S OPERATION AND OF TWO CASES OF EXCISION OF LARGE THROMBI.

*Delivered at a Meeting of the Norwich Medico-Chirurgical Society on March 7th, 1899,*

BY A. PEARCE GOULD, M.S. LOND., F.R.C.S. ENG.,
SURGEON TO THE MIDDLESEX HOSPITAL.

GENTLEMEN,—I do not propose to discuss before such an audience as this the question as to whether operative treatment is or is not demanded by a large number of patients suffering from varicose veins. While no doubt we should differ as to the exact proportion of cases in which the surgeon's aid is needed to relieve the patient we shall, I presume, all agree that many of the large army of sufferers from varicose veins derive but very imperfect relief from the various forms of stocking and bandage which are so commonly recommended and are most appropriate subjects for relief by operation. Nor will I weary you with an ...nt of all the varieties of operation which have been ... for this affection. My aim is to submit to you the ... I have been able to gather from my own experi- ... simplest of all of these operations in the hope ...agree with me that although the simplest it is ...st at our command.

...ty years ago—a time which most of us can ...-the only operation which was performed ...as in the lower limb was that known as ...are-lip pin was passed beneath the affected ...ougie was laid over the vessel, and a thread ...y twisted in figure-of-eight over the ends of ... compress the vein between the bougie and ...was hoped that this pressure would effect ...bliteration of the vein by a process of plastic ...n some cases the object was secured, but it was ...mon to find the vein still patent when the pin was ...wn, and, still worse, in those pre-antiseptic days ...puration at the needle-punctures, infective thrombo-phlebitis, erysipelas, septicæmia, and pyæmia occasionally occurred. The operation was eminently uncertain in its results and fails altogether to satisfy the demands of the surgeons and patients of to-day. It is now, I suppose, extinct; it certainly deserves to be, and we may safely predict that it has sunk into a dishonoured grave from which there will be no resurrection.

With the great revival of surgery that followed upon the adoption of antiseptic methods varicose veins were subjected to more radical and satisfactory measures. In 1875 the late Mr. John Marshall advocated and reintroduced the operation of excision of varices, and in one form or another this has been very largely employed during the last 15 or 20 years. With proper precautions it is a safe procedure and so far as the particular varix attacked is concerned the operation is radical and final. There are, however, at least two drawbacks to the operation as usually practised: (1) the time occupied in excising a number of varicose veins is often considerable and out of proportion to the gravity of the affection; indeed, in some cases the varices are so numerous that their excision is practically impossible; and (2) the operation in some cases fails to relieve the discomfort or disability caused by the varices, and in others it fails to prevent the development of fresh varices. Yesterday I saw a patient from whom I excised several large varices in both thighs and legs in the early part of 1891. In the right thigh is a scar some 12 or 13 inches long and in the leg is another eight inches long. There is a large varix immediately behind the lower part of the scar in the thigh and in the leg are numerous varices, some close to, others far removed from, the scar on the inner side. The leg still swells during the day and it is obvious that there has been a considerable re-development of varices since the operation and that the symptoms of the disease are little if at all improved.

My object, however, is not so much to discuss the value of excision of varicose veins as to lay before you the results of my experience of Trendelenburg's operation for this condition. In 1891 Trendelenburg[1] published a very interesting paper the main points of which I may thus summarise. 1. He states that there is a variety of varicose veins in which the disease begins as a dilatation of the internal saphena trunk in the thigh and that subsequently the radicles of this vein enlarge. 2. He states that the dilatation of the internal saphena vein renders its valves inefficient and that as there are no valves in the common femoral, iliac, and caval veins it follows that the superficial veins of the leg have to support the weight of a very long column of blood and under this weight their walls yield and the tubes dilate. The veins from the diaphragm to the ankle then form a long series of communicating tubes in which the blood is under the influence of gravity. When the patient is upright the blood presses down into the lower part of these tubes—the veins of the leg; and when he is horizontal, and still more when the leg is raised, the veins empty themselves into the vena cava and the right heart. 3. Trendelenburg points out that in such a case if the patient is placed recumbent and the affected leg is raised so as to empty the varicose veins and pressure is then made over the internal saphena vein above the varices, on resuming the upright position the varices do not fill out as before but remain lax and only partially filled, while immediately on removing the pressure upon the vein above the varices become distended. 4. He therefore advocates excision between double ligatures of a short piece of the internal saphena vein in the thigh to protect the varices from the pressure and reflux of blood from the common femoral vein and venous trunks above it.

Much of this paper is, I think, open to criticism. For example, the regular spread of the varix from the internal saphena vein in the thigh to the trunk and radicles of the vein in the leg is not often seen, and it is at least very doubtful whether this simple mechanical view of the pathology of varicose veins is the correct one. But leaving aside these merely theoretical considerations there are very important practical points in Trendelenburg's paper. The first is what I am in the habit of calling "Trendelenburg's symptom"—the emptying of the varices by mere posture, raising the limb, and their continuing empty or but partially filled out when the upright position is resumed, so long as the saphena vena in the thigh is compressed. The degree to which this effect of pressure upon the vein in the thigh is seen varies somewhat, but I do not think it is ever altogether absent in any case of varix of this vein or its radicles; the constancy and marked nature of this effect is always a surprise to those who are not familiar with it. This symptom was known before Trendelenburg drew attention to it. In varicocele it was long ago observed and the treatment of varicocele by a truss pressing upon the spermatic veins in the inguinal canal is based upon it. His operation consists in making an incision about two inches long over and down to the upper part of the internal saphena vein; the vessel is carefully isolated, tied at the upper and lower end of the exposed part, and the intervening inch or so is cut away. The wound is sutured and dressed with three or four layers of gauze and collodion. This is a very simple procedure—in that respect vastly superior to the older method of excision of varices, and if or when it is found to be effectual it must of necessity supplant the more troublesome operation of extensive excision. I find on referring to my notes that I have operated by Trendelenburg's method—or a modification of it—on 50 patients and 64 limbs. 49 of these patients have passed out of my hands and the fiftieth case is now in hospital, having been operated upon three days ago.[2]

In any attempt to appreciate the value of this operation an account of its immediate results up to the time the patient leaves the surgeon's hands is of no value. It is all-important to learn the later history of our patients. With this object I wrote to my 50 patients and although some of the letters brought no response, in 39 out of the 50 cases I have obtained a statement of the present state of the patients and I have seen 25 of the patients within the last few days. For convenience I have arranged the facts in the annexed table which gives the age and sex of the patient, the date of

[1] Beiträge zur Klinischen Chirurgie, siebenter Band, 1891, S. 195.
[2] Since this address was delivered at Norwich this patient has left the hospital and I have therefore included her case in the table, No. 50.

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GENTLEMEN,—I do not propose to discuss before such an audience as this the question as to whether operative treatment is or is not demanded by a large number of patients suffering from varicose veins. While no doubt we should differ as to the exact proportion of cases in which the surgeon's aid is needed to relieve the patient we shall, I presume, all agree that many of the large army of sufferers from varicose veins derive but very imperfect relief from the various forms of stocking and bandage which are so commonly recommended and are most appropriate subjects for relief by operation. Nor will I weary you with an account of all the varieties of operation which have been devised for this affection. My aim is to submit to you the facts which I have been able to gather from my own experience of the simplest of all of these operations in the hope that you will agree with me that although the simplest it is probably the best at our command.

Five-and-twenty years ago—a time which most of us can well remember—the only operation which was performed for varicose veins in the lower limb was that known as "pinning." A hare-lip pin was passed beneath the affected vein, a piece of bougie was laid over the vessel, and a thread of silk was firmly twisted in figure-of-eight over the ends of the pin so as to compress the vein between the bougie and the pin. It was hoped that this pressure would effect permanent obliteration of the vein by a process of plastic phlebitis. In some cases the object was secured, but it was not uncommon to find the vein still patent when the pin was withdrawn, and, still worse, in those pre-antiseptic days suppuration at the needle-punctures, infective thrombo-phlebitis, erysipelas, septicæmia, and pyæmia occasionally occurred. The operation was eminently uncertain in its results and fails altogether to satisfy the demands of the surgeons and patients of to-day. It is now, I suppose, extinct; it certainly deserves to be, and we may safely predict that it has sunk into a dishonoured grave from which there will be no resurrection.

With the great revival of surgery that followed upon the adoption of antiseptic methods varicose veins were subjected to more radical and satisfactory measures. In 1875 the late Mr. John Marshall advocated and reintroduced the operation of excision of varices, and in one form or another this has been very largely employed during the last 15 or 20 years. With proper precautions it is a safe procedure and so far as the particular varix attacked is concerned the operation is radical and final. There are, however, at least two drawbacks to the operation as usually practised: (1) the time occupied in excising a number of varicose veins is often considerable and out of proportion to the gravity of the affection; indeed, in some cases the varices are so numerous that their excision is practically impossible; and (2) the operation in some cases fails to relieve the discomfort or disability caused by the varices, and in others it fails to prevent the development of fresh varices. Yesterday I saw a patient from whom I excised several large varices in both thighs and legs in the early part of 1891. In the right thigh is a scar some 12 or 13 inches long and in the leg is another eight inches long. There is a large varix immediately behind the lower part of the scar in the thigh and in the leg are numerous varices, some close to, others far removed from, the scar on the inner side. The leg still swells during the day and it is obvious that there has been a considerable re-development of varices since the operation and that the symptoms of the disease are little if at all improved.

My object, however, is not so much to discuss the value of excision of varicose veins as to lay before you the results of my experience of Trendelenburg's operation for this condition. In 1891 Trendelenburg[1] published a very interesting paper the main points of which I may thus summarise. 1. He states that there is a variety of varicose veins in which the disease begins as a dilatation of the internal saphena trunk in the thigh and that subsequently the radicles of this vein enlarge. 2. He states that the dilatation of the internal saphena vein renders its valves inefficient and that as there are no valves in the common femoral, iliac, and caval veins it follows that the superficial veins of the leg have to support the weight of a very long column of blood and under this weight their walls yield and the tubes dilate. The veins from the diaphragm to the ankle then form a long series of communicating tubes in which the blood is under the influence of gravity. When the patient is upright the blood presses down into the lower part of these tubes—the veins of the leg; and when he is horizontal, and still more when the leg is raised, the veins empty themselves into the vena cava and the right heart. 3. Trendelenburg points out that in such a case if the patient is placed recumbent and the affected leg is raised so as to empty the varicose veins and pressure is then made over the internal saphena vein above the varices, on resuming the upright position the varices do not fill out as before but remain lax and only partially filled, while immediately on removing the pressure upon the vein above the varices become distended. 4. He therefore advocates excision between double ligatures of a short piece of the internal saphena vein in the thigh to protect the varices from the pressure and reflux of blood from the common femoral vein and venous trunks above it.

Much of this paper is, I think, open to criticism. For example, the regular spread of the varix from the internal saphena vein in the thigh to the trunk and radicles of the vein in the leg is not often seen, and it is at least very doubtful whether this simple mechanical view of the pathology of varicose veins is the correct one. But leaving aside these merely theoretical considerations there are very important practical points in Trendelenburg's paper. The first is what I am in the habit of calling "Trendelenburg's symptom"—the emptying of the varices by mere posture, raising the limb, and their continuing empty or but partially filled out when the upright position is resumed, so long as the saphena vena in the thigh is compressed. The degree to which this effect of pressure upon the vein in the thigh is seen varies somewhat, but I do not think it is ever altogether absent in any case of varix of this vein or its radicles; the constancy and marked nature of this effect is always a surprise to those who are not familiar with it. This symptom was known before Trendelenburg drew attention to it. In varicocele it was long ago observed and the treatment of varicocele by a truss pressing upon the spermatic veins in the inguinal canal is based upon it. His operation consists in making an incision about two inches long over and down to the upper part of the internal saphena vein; the vessel is carefully isolated, tied at the upper and lower end of the exposed part, and the intervening inch or so is cut away. The wound is sutured and dressed with three or four layers of gauze and collodion. This is a very simple procedure—in that respect vastly superior to the older method of excision of varices, and if or when it is found to be effectual it must of necessity supplant the more troublesome operation of extensive excision. I find on referring to my notes that I have operated by Trendelenburg's method—or a modification of it—on 50 patients and 64 limbs. 49 of these patients have passed out of my hands and the fiftieth case is now in hospital, having been operated upon three days ago.[2]

In any attempt to appreciate the value of this operation an account of its immediate results up to the time the patient leaves the surgeon's hands is of no value. It is all-important to learn the later history of our patients. With this object I wrote to my 50 patients and although some of the letters brought no response, in 39 out of the 50 cases I have obtained a statement of the present state of the patients and I have seen 25 of the patients within the last few days. For convenience I have arranged the facts in the annexed table which gives the age and sex of the patient, the date of

[1] Beiträge zur Klinischen Chirurgie, siebenter Band, 1891, S. 195.
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TABLE OF 50 CASES OF TRENDELENBURG'S OPERATION FOR VARICOSE VEINS.

| No. | Age. | Sex. | Date of operation. | Condition before operation. | Result. |
|---|---|---|---|---|---|
| 1 | 46 | M. | 30/9/95 | A mass of large varices just above and on the inner side of the left knee, extending along the inner side of the leg; unable to work on account of pain. | Seen 4/3/99.—Vein was ligatured in lower third of thigh. Has worked as an agricultural labourer ever since operation. For the first two years the varices steadily diminished in size. Lately a varix has developed above the scar and communicates with the varix below which has recently enlarged. Varix above the scar is sometimes painful. |
| 2 | 30 | F. | 29/2/96 | Internal saphena vein enlarged from Scarpa's triangle to the ankle; a large varix at the inner side of the knee, a second large varix crossing in front of the leg just below the tubercle of the tibia; many smaller varices along inner side of the leg. | Seen 4/3/99.—Vein was ligatured in middle third of thigh. Varices have all practically disappeared. No pain. |
| 3 | 20 | F. | 18/3/96 | Varices in the lower part of the inner side of the right leg and calf. | No report. |
| 4 | 36 | F. | 20/3/96 | Varices at the inner and lower part of the right leg and one or two in mid-thigh. | Seen 4/3/99.—Vein was ligatured at the inner side of the right knee. Varices very small; pain equally in both legs before and during menstrual periods. No varices in the left leg. |
| 5 | 20 | F. | 9/4/96 Double. | Varix of the left internal saphena vein below head of the tibia. Varix of right internal saphena vein from Scarpa's triangle to just below the knee. | Seen 4/3/99.—Left vein was ligatured at the inner side of the knee; varices have disappeared. Right vein was ligatured at inner side of the knee; varix above continuous by a large vein with varix below the scar; no improvement in the varices. On the whole, less pain than before operation. |
| 6 | 27 | F. | 2/5/96 | Large varix crossing lower third of the thigh obliquely down and out; another crossing front of knee below the patella; several small varices over the calf, especially on outer side. | Letter 27/2/99.—"Vein smaller; can do all my work, and only after any extra exercise do I feel any pain." |
| 7 | 21 | M. | 27/5/96 Double. | A mass of varices on the right calf, another mass in front of the ankle, a dilated but non-tortuous vein at inner side of the knee. The same conditions on the left side, and in addition a bunch of varices on the inner side of the thigh close above the knee. | Seen 16/7/97.—Much better for the operation; varices in the thighs have disappeared; those over the calves much smaller and less tense. Letter 25/2/99.—Able to do all his work without pain; greatly benefited by the operation. |
| 8 | 2 | M. | 3/6/96 | Varices in the left calf. Suffered severely in spite of wearing elastic stockings; "could hardly walk." | Seen 4/3/99.—Ligature at the junction of the upper and middle thirds of thigh. Varices smaller, soft. "Absolutely no pain since operation." |
| 9 | 19 | F. | 4/6/96 | No record. | No record. |
| 10 | 28 | M. | 12/6/96 Double. | Varices in both calves and in right internal saphena vein in thigh. | Nothing known. |
| 11 | 23 | F. | 17/6/96 Double. | A small varix above the right knee, another in upper part of the leg and small scattered ones over the outer side of the leg and dorsum of the foot. On left side a bunch of varices above the knee and a long varix on inner side of leg. A small ulcer below inner ankle. | Letter 27/2/99.—Patient is in the ninth month of her first pregnancy. She writes: "I have derived great benefit from the operation. The large veins seem to swell occasionally almost as much as before ..... although I do not suffer with them." |
| 12 | 24 | F. | 24/6/96 Double | Large varices in the left thigh and leg, especially at middle of the thigh. On the right side larger varices in the leg, smaller in the thigh. | No record. |
| 13 | 25 | M. | 6/7/96 Double. | Internal saphena vein enlarged from the groin to the foot on each side; on the right side a large pouch opposite the knee and a sinuous varix just below the knee. On the left side a large tortuous varix at middle of the thigh. | Seen 4/3/99.—Right veins were tied at middle of the thigh; varix just above the scar communicating with the varix immediately below. Right veins are painful occasionally, much less than before operation. Left vein tied at the junction of the upper and middle thirds of the thigh; no varix above the scar; varices below much smaller. At work without bandage as an indoor servant. |
| 14 | 48 | M. | 6/7/96 | Left internal saphena vein enlarged from the groin to just above middle of the leg, with a larger bunch of varices at inner side of the upper part of the leg. | Seen 4/3/99.—Vein tied in middle of the thigh. Varices barely visible. No pain. At work as engine-driver; does not wear a bandage. |
| 15 | 53 | M. | 22/7/96 | Many very large varices on inner side of the lower third of the left thigh and along inner side of the leg. | Seen 4/3/99.—Vein ligatured in middle of the thigh; no varices above; varices over the calf shrunk and soft. Pain in calf at night after much walking; has lost the languor and sense of weight. Thrombosis occurred at inner side of the leg five days after operation. |
| 16 | 17 | F. | 29/7/96 | Varix on inner side of the calf and a small one crossing the lower part of front of thigh. The varix first appeared in the calf and then spread to the thigh. | Letter 26/2/9.—"Veins much smaller. I suffer scarcely any pain, except when over-tired from long standing." |
| 17 | 21 | F. | 29/7/96 | Varices and an ulcer at the lower part of the leg. Left hospital on the thirteenth day; ulcer healed. | No record. |
| 18 | 22 | M. | 29/7/96 | Right internal saphena vein enlarged along its whole course; a large varix on inner side of the thigh just above the knee; two or three varices over the calf and above the inner ankle. | Seen 4/3/99.—Vein was ligatured just above the knee. Varices above scar communicating with those below, not diminished in size. No pain. Works as a farmer; does not wear a bandage. |
| 19 | 25 | M. | 31/7/96 | Left internal saphena vein dilated and tortuous from mid-thigh to lower third of the leg with a mass of varices at inner side of the calf. The varices appeared first at calf and then spread up the thigh and down the leg. | Letter 28/2/99.—"If I did not see my veins should not know I had them." The veins are not smaller, but he has lost all his pain. |
| 20 | 23 | F. | 10/10/95 | Varices on inner side of each leg and behind the knee; larger on the left side. | Operation on the left side only. No further record. |
| 21 | 19 | M. | 9/1/97 Double. | Both internal saphena veins were enlarged from groin to ankle; several large varices across each calf and a very prominent thin-walled loop three inches below the right knee. | Letter 1/3/99.—Veins have not altered in size. |
| 22 | 27 | F. | 14/1/97 Double. | Both internal saphena veins were varicose in middle of thigh; several varices in right calf. | Seen 4/3/99.—The right vein was ligatured about the middle of the thigh; several varices developed at scar; in other respects the condition of the limb was unaltered. The left vein was ligatured in the upper third of thigh; varices were considerably diminished; no pain. |

TABLE OF 50 CASES OF TRENDELENBURG'S OPERATION FOR VARICOSE VEINS—*(continued)*.

| No. | Age. | Sex. | Date of operation. | Condition before operation. | Result. |
|---|---|---|---|---|---|
| 23 | 39 | F. | 16/2/97 | A large varix at the inner side of the knee and another at lower part of the thigh; small ones at the inner ankle. Great aching in the whole limb when up, preventing walking; the limb was very tender at night. | Letter 23/2/99.—Walks very fairly; leg aches less; the nocturnal tenderness is unaltered. |
| 24 | 26 | F. | 3/4/97 | Several large varices over the right leg and dorsum of the foot. A healed ulcer over the lower third of the right leg, from which a hard tender cord extended up in course of the internal saphena vein. Vein in the thigh was not felt. | Seen 4/3/99.—Vein ligatured at junction of the middle and lower thirds of thigh; slight development of varices about the scar; varices in the leg very lax; no pain. The scar of the ulcer is soft and non-adherent. |
| 25 | 29 | M. | 29/4/97 | Right internal saphena vein enlarged from saphena opening to three inches below the knee. | No record. |
| 26 | 25 | F. | 1/5/97 | No detailed record. | Seen 4/3/99.—Veins ligatured in lower quarter of the right thigh; varices much smaller; much less painful than before operation; still has slight pain around ankle. |
| 27 | 34 | F. | 20/5/97 | Left internal saphena vein in the thigh was enlarged to the size of the index finger; three ulcers in lower third of the leg. | No record. |
| 28 | 20 | F. | 26/5/97 | Numerous varices in front and on inner sides of the lower fourth of the right leg. Similar varices in upper part of the right calf; large varix above the right knee; and almost nævoid patches on inner side of the middle of thigh. | Right side only operated on. No late record. |
| 29 | 18 | M. | 24/6/97 | Varices on inner side of the right leg. | Seen 4/3/99.—Vein tied at junction of upper and middle thirds of the thigh. Vein above the scar dilated and communicating with the vein below; says varices are larger than before the operation. |
| 30 | 34 | M. | 13/7/97 | A large pouch-like sac on inner side of the right knee; a large mass of varices on front of the leg below the calf. | Seen 22/3/98.—Veins have shrunk and practically disappeared. No pain and no œdema; is working full time. |
| 31 | 22 | F. | 18/12/97 Double. | On the left side a large vein was running from behind the internal malleolus above the ankle; varices at junction of lower and middle thirds of the other side; a large varix running obliquely up and in across the lower third of the thigh and on up to Scarpa's triangle. On the right side many large veins on the front of leg, a large varix below the knee and extending up along the inner border of the ham for three inches above the knee. | No record. |
| 32 | 37 | F. | 5/1/98 | Several varices scattered over the leg; some were excised two years ago without permanent relief of pain. | The patient is a nurse; she is now able to do her work without pain. |
| 33 | 24 | M. | 3/2/98 | A large dilated vein ran along the inner side of the left calf, ending in a "knot" about the middle of the thigh. | Letter 2/3/99.—"Result entirely satisfactory. No pain. I am able to do my full amount of work." |
| 34 | 52 | F. | 24/2/98 Double. | Many varices in both limbs for 26 years; had worn elastic stockings on the legs and thighs (25 years); had had four attacks of thrombosis. "Never any comfort sitting, standing, or lying." | Seen 4/3/99.—"Quite a different woman." Walks with the greatest comfort and never gives a thought to the veins. The varices have disappeared from the thighs; in the legs they give no trouble; but she cannot walk without a bandage up to the knees as the "legs are too weak." |
| 35 | 30 | M. | 28/2/98 Double. | Numerous large varices in both legs, gradually spreading up the saphena vein in the thighs; complained of a sense of "dulness in the legs." | Seen 9/12/98.—Varices hardly visible in the right leg; in left leg they are small and lax; the sense of dulness has disappeared. An officer in the army; would have been disqualified for active service, but now is in splendid condition. |
| 36 | 33 | F. | 12/3/89 Double. | Right internal saphena vein varicose from the ankle to within one and a half inches of the groin, very large in upper part of the thigh. Veins on the inner side of the left leg, calf, and knee numerous, large, and tortuous. A large globular swelling about the middle of the inner side of the thigh where a large branch from the outer side of thigh joined the internal saphena trunk. There were patches of atrophy of the skin in lower third of leg. | Seen 4/3/99.—Vein ligatured in upper third of the thigh. There is much less pain and discomfort; varices very much smaller, none projecting at the knee. Some sense of fulness and heaviness about the left ankle and behind the left knee. |
| 37 | 33 | F. | 5/3/98 | A large bunch of varices on inner side of the right calf, a short varix on internal saphena vein in the thigh; aching pain during the day and often at night also. | Letter 28/2/99.—"My veins are almost well and I do not feel any pain or discomfort unless I walk about three or four miles in the day or stand for a long time; they do not ache at night or when I am sitting as they used." |
| 38 | 19 | M. | 4/5/98 | Varix behind and on inner side of the left knee extending up to Scarpa's triangle. | Seen 4/3/99.—Vein ligatured at the groin. Varices hardly visible. Legs and thighs very small; he complains of pain in the ankles when he walks far, but less since the operation. |
| 39 | 39 | M. | 5/5/98 | A large varix from middle of the thigh to the ankle, very large just above the knee. | Seen 4/3/99.—Vein ligatured at junction of upper and middle thirds of the thigh. Varices over lower third of the thigh and around the knee shrunken. He says the pain is worse than before operation; this pain is felt at the back of the lower part of the thigh and on each side of the knee. He stands all day at his work. |
| 40 | 46 | F. | 2/6/98 | Varix on inner side of the left knee with a thick-walled large vein running up to near the saphenous opening, where more enlarged and tortuous veins were seen. | Seen 28/2/99.—Vein tied at its upper end. Varices have continuously shrunk since operation; she is quite free from pain in spite of very hard work as a nurse. |
| 41 | 36 | F. | 8/6/98 | Varices from the junction of upper and middle thirds of the right thigh to about three inches below the knee; a large varix on outer side of the right ankle. | Letter 1/3/99.—"Since operation veins have gradually got smaller, only being large and painful at the monthly periods." |
| 42 | 43 | M. | 22/6/98 | Left leg and foot covered with large varicose veins; another varix on inner side of the left knee; numerous dilated veins in the right leg, but not so large. Varices first noticed 22 years ago in left calf. | No record. |
| 43 | 28 | F. | 23/6/98 | Varix on inner side of the right leg at junction of lower and middle thirds. No varix on internal saphena vein in the thigh. Suffered great pain in her work as draper's assistant. | Seen 4/3/99.—Vein ligatured at the groin. Varices have disappeared. She says she has not had any pain or discomfort since operation. |

TABLE OF 50 CASES OF TRENDELENBURG'S OPERATION FOR VARICOSE VEINS—(*continued*).

| No. | Age. | Sex. | Date of operation. | Condition before operation. | Result. |
|---|---|---|---|---|---|
| 44 | 14 | M. | 3/2/98 | A small varix at inner side of the right knee. | Seen December, 1898.—Vein ligatured in the groin. The varix has disappeared. |
| 45 | — | F. | 22/10/98 | A very large pouch on the internal saphena vein at the knee; several large varices in the leg. Complained of great pain. | Seen 24/2/99.—Vein ligatured at the groin. Varices have much diminished; the large pouch at the knee has shrunk to a sixth of its former size. Much less pain. |
| 46 | 25 | F. | 10/11/98 | Varices on inner and posterior surfaces of the left thigh and leg; noticed below the knee 10 years ago, above the knee three years ago. | Letter 28/2/99.—"Veins no smaller; very painful sometimes during the day when I am sitting down, but not at night." |
| 47 | 28 | F. | 1/12/98 | Varices in the right leg. Thrombosis in May, 1896. Hæmorrhage from a burst varix, May, 1896, and again in May, 1897. Admitted November, 1898, with an unhealed ulcer in lower part of the leg. | Letter 27/2/99.—"Veins in right leg smaller; the hardness still remains and they swell a great deal during the day. I have very little pain in that leg." |
| 48 | 31 | F. | 12/1/99 Double. | Varices in both legs and in lower part of the right thigh. | Patient left hospital on Feb. 3rd; wounds healed; veins smaller. |
| 49 | 24 | F. | 9/2/99 Double. | Varix on the right leg extending across front of the knee and down to the inner ankle. On the left limb a very large varix on the inner side of upper half of leg. | Seen 3/3/99.—Veins tied over Scarpa's triangle. Right varices scarcely visible. The varix in left leg shrunk, its upper end thrombosed. |
| 50 | 39 | F. | 4/3/99 | Varix on the right side extending from the dorsum of the foot along the course of the external saphena vein to the ham, and thence for seven inches along the course of the internal saphena vein and thigh. The whole varix fills from above from the internal saphena vein. | Seen 10/3/99.—Internal saphena vein divided in the groin. Varix thrombosed from its upper end to junction of the upper middle thirds of the leg, invisible below this point. |

operation, the condition of the veins before operation, the condition of the veins now, and whether this last fact has been communicated to me by letter or observed by myself. In the preparation of this table I have received very great assistance from Mr. S. B. Hulke, the surgical registrar of Middlesex Hospital. I may here add three other facts about these cases. The patients have applied for treatment almost without exception on account of more or less pain and disability for work; in every case Trendelenburg's symptom has been present and the primary recovery from the operation has been satisfactory—almost always without incident. The table has not been complicated by the constant repetition of these facts.

A study of the table shows that the cases are very varied and are by no means all members of a limited group such as Trendelenburg described and for which he suggested his operation. I have taken the cases exactly as they have presented themselves to me for treatment, and if I have been able to demonstrate the "Trendelenburg symptom" I have submitted them to this operation. No case has been rejected where this symptom has been obtained whatever the state of the veins may have been. In several of the cases I have modified Trendelenburg's operation in one particular which has proved to be an important one. It occurred to me that if the operation succeeded by its relieving the varicose veins from the pressure of the column of blood above them it would be as effectual if the vein were divided between two ligatures a short distance above the varix as if the vein were obstructed at its upper end. Trendelenburg's description of the gradual spread of the varicose condition in a distal direction was a further inducement to occlude the vein close above the varix. Wherever possible I have indicated in the table the exact seat of operation. The importance of this modification was plainly seen on March 4th, when about 20 of these patients presented themselves for examination. Thus in two cases (Nos. 22 and 24) I found that several large veins had developed under and immediately around the scar, forming quite a group of varices. And in five other cases (Nos. 1, 5, 13, 18, and 29) newly developed veins about the scar have formed a communication between the vein above the ligature and the varix below it, and the operation has not succeeded in permanently interrupting the long column of blood from the abdomen to the leg. In these five cases (Nos. 1, 5, 13, 18, and 29) the internal saphena vein *above* the ligature has become varicose since the operation, and in at least one case this new and highly placed varix is the seat of pain. Case 1 illustrates these points very well, and as I have seen the patient several times since the operation I have been able to watch the progress of events. This man is a healthy agricultural labourer who came to me in October, 1895, with extensive varices in the left thigh (lower third) and leg which gave him so much pain that he was unable to continue his work in spite of wearing elastic stockings and elastic bandages. Trendelenburg's symptom was well marked. I excised a portion of the internal saphena vein in the lower third of the thigh above the top of the highest varix. The man returned to his work in a fortnight and for more than two years he was able to do all his work without any pain; during this time the large varices contracted and were only partially filled out with blood. During the last year, however, the saphena vein above the scar has become markedly varicose and a large vein can be plainly seen passing down from this varix alongside the scar and opening into the upper end of the varix below. With the development of this vein the lower varices are filling out much more. The man now complains of pain when he has a hard day's work and he refers this pain to the thigh just above the scar; it is probably caused by the varix of the saphena there.

For two years the operation was entirely successful, but it has ultimately failed owing to the development of these new varices and the reopening of the direct channel from the common femoral vein to the varices. The development of these varices above the ligature and in or near the scar tissue is a very interesting fact. I have never seen anything at all like it in any other scars. I have seen several instances, on the other hand, where the low operation has been quite successful. I would refer especially to Nos. 2, 4, 5 (right side), 13 (left side), 14, 15, and 26 in the table. My conclusion is that ligature of the healthy saphena vein at some distance below the groin is not by any means a certain cure for varix lower down in the limb; in some cases it succeeded but in others it failed, and I am not able to explain the different results met with. As these different results may be met with in the same patient (Nos. 5 and 13) it must depend upon a local condition and not upon any central condition or general state.

Turning now to the cases of excision of a portion of the saphena vein near its entrance into the femoral vein I find that in no single instance has it failed to relieve the patient of all pain and that it has been invariably followed by a marked—often a very marked—shrinking of the dilated veins. As an example of the extent to which this shrinking occurs I exhibit illustrations (Fig. 1 and Fig. 2), taken before and after operation, of the lower limbs of the patient in Case 36—this is by no means an exceptional case. The very satisfactory result of this operation is well exemplified in Cases 8. 11, 30, 33, 34, 35, 36, 37, 38, 40, 43, 44, and 45 in the table.

So far as I have seen, the usual process of "cure" of the varix is by a more or less rapid shrinking of the vein, in some cases to quite its normal size, in others to just short of that; this shrinking may progress for many months. In three cases thrombosis has occurred in the varix at a distance from the ligature; in two other cases thrombosis occurred in the vein immediately below the lower ligature and slowly spread down. In no case have I seen thrombosis above the ligature. I believe that many surgeons on the continent think it essential to keep the patient recumbent for a month after the operation in the hope that obliterative phlebitis will occur in the varices. I

have only kept my patients in bed long enough to secure repair of the small wound—usually a week. In one case (No. 32) I had previously excised some painful varicose veins with marked temporary benefit. The pain, however, returned in other veins and the patient, a surgical nurse, was greatly troubled whenever she had anything like a hard case to nurse. Since the Trendelenburg operation she has been greatly relieved, is able to do all her work in comfort, and she has derived far greater and more lasting benefit from it than from excision of the varices. I refer to this case particularly because it is not often that we can compare two operations for the same condition upon the same patient. In one case (No. 34) my chief hope in operating was that I might prevent attacks of thrombosis. The patient was a lady nurse who had a nursing home and had therefore much standing and walking. She had very extensive varicose veins in both limbs which had existed for 26 years. For 25 years she had worn elastic bandages on the legs and thighs and in spite of that she suffered very severely from pain both in

FIG. 1.

Reproduced from a photograph taken before operation (No. 36).

standing, sitting, and lying, and in addition she had recently suffered from four attacks of thrombosis, each one at a higher level in the limb than its predecessor. Since the operation, now a little more than 12 months ago, this patient has had no attack of thrombosis; her pain has disappeared, and she stands and walks about with comfort. Her only disability is that if she leaves off her bandages below the knee she feels so weak that she is afraid to walk; she attributes this to having worn tight bandages for 25 years. She is a tall woman and the muscles of the legs are very small.

Looking at the whole series of 50 cases I am struck by the almost uniform relief of pain the operation has afforded; in not a few cases its effect upon the pain is more marked than its effect upon the varices (Cases 1, 18, and 19). In one or two instances the trouble now complained of is not due to the varicose veins; thus, the patient in Case 4 complains of pain in the leg "before and during her menstrual period," but this pain is quite as bad in the left leg which is and always has been quite free from varicosities. Again, in Case 23 the patient still complains of a strange tenderness of the thigh and leg when she is recumbent; the operation has removed the other pain which she experienced, but has not affected the tenderness. It is at least open to doubt whether this tenderness is connected with the varix at all. It is, I think, evident from these cases that if we would ensure success from this very simple operation we must obliterate the saphena vein close below its entrance into the femoral vein. The operation performed here is very satisfactory in its immediate and late results and where Trendelenburg's symptom is well marked may be confidently relied upon to relieve the patient's symptoms and lead to a permanent shrinking or obliteration of the varicose veins.

One of the most troublesome complications of varicose veins is aseptic thrombosis—we must all have realised this. It is sometimes very painful, it is not free from danger to life from embolism, and the course of the disease under the common palliative expectant treatment is often exceedingly slow and not unfrequently followed by relapse. Under these

FIG. 2.

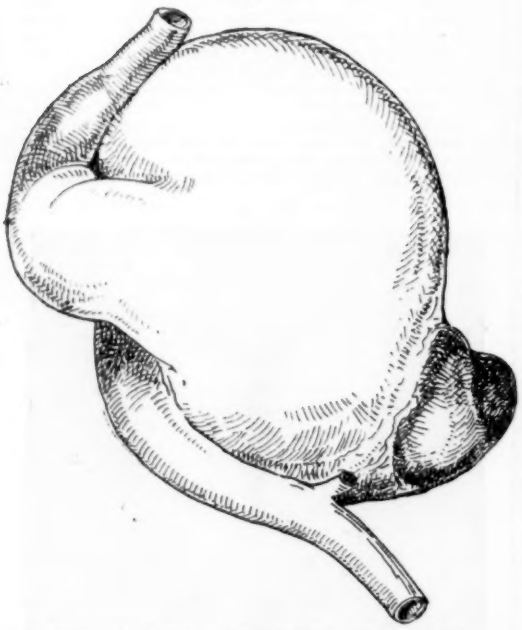
Reproduced from a photograph taken in December, 1898, after operation (No. 36).

circumstances it is reasonable to try whether surgery does not afford a better means of dealing with these cases than the older methods of rest, local sedatives, a moderated diet, alkaline salines, and, above all, great patience. I think it does. For many a long year surgeons have been in the habit of incising a thrombosed pile—the same condition occurring in one of the hæmorrhoidal veins—and I have on two occasions made a free incision into large and very painful aseptic thrombi in the thigh, turned out the clot, and left the wound to granulate up. Both patients were relieved by the operation and made a good recovery, but the healing of the wound was slow. More recently I have treated two of these cases by excision of the thrombosed portion of the vein and immediate closure of the wound. Union by first intention was obtained and the result has been such that I hope you will agree with me in thinking that this operation may be well recommended for this tedious and troublesome condition.

CASE 1.—The first of these cases occurred in a woman, aged 57 years, the mother of 13 children, who had noticed

enlarged veins in the left leg ever since her fourth confinement. Some years ago a much larger venous swelling appeared on the inner side of the leg just below the knee. She compared its size to that of a hen's egg and told me that she noticed that when she lay down this swelling collapsed

FIG. 3.



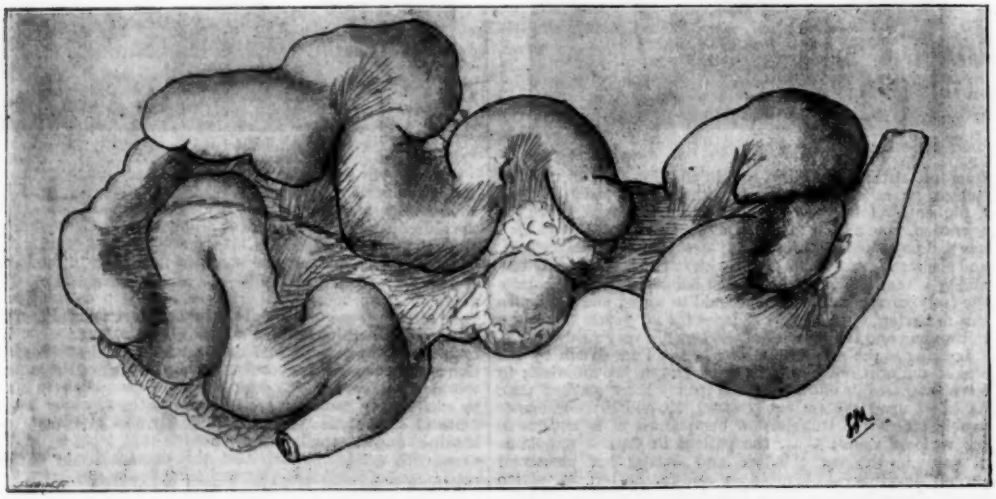
The thrombosed varicose vein excised in Case 1 (natural size).

and would hang down as a bag when she stood up. She experienced no pain in this pouch until Sept. 26th, 1898, when without known cause this large venous pouch became the seat of acute pain; it was found to be hard and the skin over it red. She was admitted to hospital on Oct. 3rd and I found a stout woman with extensive varices in the left thigh and leg and a very large thrombosed venous pouch just below the knee. She complained of severe pain and the swelling was very tender. The skin over and around it was of a deep red colour. Her pulse was 72 and her temperature was 99°F. (this became normal on Oct. 4th and continued so). I raised the limb by a pillow, enjoined absolute rest, careful diet, attention to the bowels, and locally I ordered hot belladonna fomentations. Under this treatment the pain subsided, but the swelling showed no signs of lessening and it continued very tender. On Oct. 20th I excised this thrombosed varix. The wound healed by first intention and the patient left the hospital with a sound leg on Nov. 5th—16 days after the operation. I saw her on March 4th, 1899; she was then well and had experienced great indirect benefit from the operation. For while formerly she had a good deal of pain in the limb and experienced difficulty in getting about her work, now she is free from pain, gets about her work with ease, and all the varices in the limb are smaller. I have preserved the parts excised and now show them to you, which absolves me from any need of describing them (see Fig. 3).

CASE 2.—The second patient was a man, aged 38 years, who noticed varicosities in the left leg when 16 years of age and he states that they continued to increase up to 20 years, but not since. The veins do not appear to have caused him any material inconvenience till Nov. 12th, 1898, when without any injury or other known exciting cause he experienced acute pain just below the knee and found that the veins there were hard and very tender and the skin over them was reddened. As getting about increased his trouble he took to his bed and when no further improvement occurred he applied at the hospital and was admitted under my care on Dec. 14th, 1898. I found a large and very tortuous varix extending from over the inner condyle of the femur downwards and inwards nearly to the tubercle of the tibia; this vein was thrombosed and the skin over it was deep red in colour, swollen, and tender; there was no rise of temperature or increased pulse-rate. Next day, Dec. 15th, I excised this thrombosed vein and when the wound was dressed on Dec. 28th it was found to be firmly healed. Two days later the internal saphena vein was found to be cord-like for a short distance above the knee, and on Jan. 1st, 1899, a small thrombus was felt in the calf five inches below the wound. I therefore gave the man a few days' further rest in bed and he left the hospital well and able to get about on Jan. 8th. I saw him about a month later and he was then doing his usual work and was free from all trouble in his leg. Fig. 4 is from a drawing of the parts removed, kindly made for me by my dresser, Mr. Milburn; it faithfully represents the size and disposition of the vein.

In cases such as the above excision of the thrombosed vessel is, I believe, the best line of practice.

FIG. 4.



Thrombosed varicose vein (natural size) excised on Dec. 15th, 1898, in Case 2.

# CHRONIC MEDIASTINITIS (INDURATIVE MEDIASTINO-PERICARDITIS).

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*(Concluded from p. 884.)*

IT may be well to state here that in searching the past records of St. George's Hospital pericarditis which occurs so often in children who are the subjects of rheumatism, and which is occasionally a complication of other diseases, has been excluded unless the inflammatory process had involved with the pericardium other structures in the chest. Further, those cases in which extensive matting together by fibrous tissue of the thoracic viscera, as the result of tuberculous pleurisy, even though complicated, as they were in many instances, by extensive pericarditis, have also been excluded as not being examples of the disease under consideration. As the result of my inspection of the post-mortem records of St. George's Hospital I have only been able to find four instances of uncomplicated indurative mediastino-pericarditis, two of which occurred in my own practice during the period of 20 years as one of the physicians. During the year 1896 two additional cases were published, one recorded by Dr. R. J. Buchanan,[1] the other by Dr. E. Olliver.[2] Dr. G. A. Sutherland has published a case[3] in which he made the diagnosis of chronic mediastinitis. Dr. Frederick Taylor, in an address to the Nottingham Medico-Chirurgical Society,[4] relates a case of combined pleural and pericardial adhesions with mediastinitis in a woman aged 42 years. Dr. Blumfeld[5] gives a remarkable case of the disease in a male child, aged 15 months, under the care of Dr. Sequeira in the North-Eastern Hospital for Children. Sir Samuel Wilks, in a paper on "Adherent Pericardium as a Cause of Cardiac Disease,"[6] relates five cases of that affection; some of these are included in Dr. Harris's tables, but Case 2 (that of a boy, aged nine years, and recorded in the accompanying table as Case 5) is omitted from them, presumably because there was no actual mediastinitis. It is now included as being probably an instance of the disease in its earlier stage. The late Dr. Habershon gives full particulars[7] of a case of fibroid thickening of the tissues in the anterior mediastinum in a male aged 37 years. Sir William Gull[8] gives the outlines of a case of fibrous thickening of the tissue in the mediastinum, involving the right bronchus, the right vagus nerve, and branches of the pulmonary plexus. The above cases are, with the exception of those recorded by Dr. Buchanan and Dr. G. A. Sutherland, all of them complete—i.e., fatal cases in which a post-mortem examination took place.

*Age.*—Referring to Dr. Harris's tables it is found that the disease is of more frequent occurrence in adults than in children. This is probably due to the fact that it is, as its name implies, chronic, and that a fatal termination does not, as a rule, take place until after a lapse of years. Of the 22 cases collected by Dr. Harris nine occurred in persons under 20 years of age (one of these patients is stated in the report to have been young—the exact age is not given), 10 occurred between the ages of 20 and 30 years, three between 30 and 40 years, and one at the age of 50 years. Of the cases observed by Dr. Harris himself two were under the age of 20 years, the other was 50 years. Sir Samuel Wilks's case occurred in a male child aged nine years, Sir William Gull's in a man aged 61 years, Dr. Habershon's in a man aged 37 years, Dr. G. A. Sutherland's in a male child aged eight years, Dr. R. J. Buchanan's in a man aged 21 years, Dr. E. Olliver's in a man over 50 years, Dr. F. Taylor's in a woman aged 42 years, and Dr. J. Blumfeld's in a male infant aged 15 months. Of the four cases collected from the records of St. George's Hospital one was between 20 and 30 years (25); two were between 30 and 40 years (31 and 34); and one was between 50 and 60 years (55). According to the above figures Dr. Harris's observation that the disease is more common in early life is borne out.

*Sex.*—Grouping together Dr. Harris's cases (those collected from the records of St. George's Hospital) and the cases recorded by Sir William Gull, Sir Samuel Wilks, Dr. Habershon, Dr. Buchanan, Dr. Olliver, Dr. Sutherland, Dr. F. Taylor, and Dr. Blumfeld, the numbers amount to 36. Of these 28 were males and seven were females. The sex is not stated in that narrated in Dr Henry Ashby's work on Diseases of Children, Medical and Surgical. This case is included in Dr. Harris's tables. The figures show a proportion of males to females of four to one.

*Causation.*—On looking over Dr. Harris's tabulated cases one is struck by the fact that rheumatism as an obvious cause of the disease is recorded definitely in three cases only out of his 25, while in one instance the history of rheumatism was doubtful. Too much importance, however, should not be attached to this fact seeing that the external manifestations of that disease are often so slight in children as to escape notice. No history of rheumatism is recorded in any of the cases from St. George's Hospital or in Sir William Gull's, Sir Samuel Wilks's, Dr. Buchanan's, Dr. Olliver's, Dr. Habershon's, Dr. Sutherland's, Dr. F. Taylor's, or Dr. Blumfeld's. In this disease, chronic mediastinitis, there appears to be no particular antecedent affection which can be regarded as being especially causative—e.g., in four cases scarlet fever was antecedent, in three enteric fever, in two measles occurred in early life, three of the patients were heavy drinkers, two had suffered from influenza, while in eight there was no history of any illness up to the onset of the attack which proved fatal. One was probably traumatic (Harris, Case 1). As is shown by Dr. Harris's tables, indurative mediastino-pericarditis may occur apart from tuberculous affection seeing that in but two of his collected cases (both recorded by Kussmaul) were the lungs affected by tuberculosis and in one (recorded by Claessen) a bronchial gland and some mesenteric glands were found in a caseous state; the liver, spleen, and kidneys were affected by miliary tubercles. In two, however, of the three cases which came under Dr. Harris's own observation tubercle was found in the lungs after death; in Dr. Blumfeld's case the mediastinal glands were caseous. Neither in my own four collected cases nor in those under the care of Sir Samuel Wilks, Sir William Gull, Dr. Habershon, or Dr. F. Taylor was any evidence of tuberculous disease found.

In examining the records of the reported cases of chronic mediastinitis or indurative mediastino-pericarditis the frequent concurrence of chronic peritonitis is remarkable. Dr. F. Taylor in his article on Combined Pleural and Pericardial Adhesions reviews the opinions of various writers on the subject and quotes Dr. Heidemann's conclusions as to the pathological sequence of events—viz.: "1. Chronic inflammation of all the serous membranes. 2. Stagnation occasioned by degeneration of the cardiac muscle leading to ascites because on account of the chronic peritonitis the peritoneal vessels offer a locus minoris resistentiæ. 3. The cirrhotic process in the liver, so often observed under these circumstances, is occasioned by the extension of inflammatory irritation from the capsule of the liver as well as by the chronic hyperæmia of the organ. 4. By the growth and contraction of this connective tissue in and about the liver the stagnation and exudation in the abdominal cavity are increased." These, doubtless, are a sufficient explanation of the various pathological changes found in this disease, but an insufficient explanation of the primary cause of such marked examples of the chronic inflammation exhibited in Case 1 and in Dr. Blumfeld's case of an infant 15 months old.

*Condition of the Heart at the Necropsy.*

| *Harris's cases.* | Cases. | *Other cases.* | Cases. |
|---|---|---|---|
| Not mentioned ... ... ... | 9 | Habershon's case, left ventricle dilated and hypertrophied; right dilated ... | 1 |
| Enlarged, muscle pale and flabby, thin ... ... ... ... | 1 | Sutherland's case, not enlarged clinically ... ... ... | 1 |
| About the usual size ... ... | 2 | Gull's case, healthy ... ... | 1 |
| All the cavities rather dilated | 3 | Wilks's case, left ventricle thin; fibrous invasion ... | 1 |
| Right ventricle hypertrophied... ... ... ... ... | 1 | Olliver's case, walls fatty and thickened ... ... ... ... | 1 |
| Very much enlarged ... ... | 2 | Blumfeld's case, hypertrophied and dilated... ... | 1 |
| Dilated and fatty ... ... ... | 1 | F. Taylor's case, right side dilated and hypertrophied | 1 |
| A little enlarged ... ... ... | 1 | *St. George's Hospital cases.* | |
| Acute endocarditis of mitral valve, a focus of myocarditis ... ... ... ... ... | 1 | Healthy ... ... ... ... ... | 2 |
| Tubercle in heart muscle ... | 1 | Small, (?) arrested growth ... | 1 |
| Enlarged ... ... ... ... ... | 1 | Fibrous invasion of walls of right ventricle ... ... ... | 1 |
| Enlarged and dilated ... ... | 1 | | |
| Left ventricle of usual size; right ventricle hypertrophied... ... ... ... ... | 1 | | |

*Apex-beat.*—St. George's Hospital Cases:—In Case 1 it was in its



[1] Liverpool Medico-Chirurgical Journal, 1896, vol. xvi., p. 325.
[2] New York Medical Journal, 1895, vol. lxi., p. 82.
[3] THE LANCET, Jan. 8th, 1898. [4] THE LANCET, Oct. 29th, 1898.
[5] THE LANCET, Dec. 31st, 1898.
[6] Guy's Hospital Reports, Third Series, vol. xvi., p. 204.
[7] Transactions of the Pathological Society, vol. xxvii., p. 79.
[8] Guy's Hospital Reports, Third Series, vol. v., p. 312.

normal position so far as could be ascertained; in Case 2 it was not recorded; in Case 3 the position was normal so far as could be ascertained; and in Case 4 it was not recorded. The heart was enlarged. In Dr. Habershon's case it was not perceptible. In Dr. Buchanan's case it was in the fifth interspace, four inches from the mid-sternum. In Dr. Olliver's case the apex-beat was not seen. In Dr. F. Taylor's case it was in the fifth space, an inch below and half an inch internal to the nipple. In Dr. Blumfeld's case, in Sir Samuel Wilks's case, and in Sir William Gull's case the position of the apex was not mentioned. In Dr. Sutherland's case it was not perceptible.

It is evident from an examination of the above figures that hypertrophy of the heart is not necessarily a result of indurative mediastino-pericarditis. It will be noticed that in nine of Dr. Harris's cases no mention is made of the condition of the heart, and as it is scarcely likely that the existence of its hypertrophy would have been overlooked or omitted from the account of the necropsy by competent observers it may not be too much to assume that no increase in the size of the organ was found in these nine cases. It is a matter for regret that the weight of the heart is not stated in each case and that the description of its condition is in some instances insufficient. The table shows that the size of the heart varies in this disease. In 11 only of the 36 cases is there distinct mention of enlargement. In one instance the heart is said to have been "very much enlarged"; in one it was "a little enlarged"; in three instances it was "enlarged and dilated"; and in two the right ventricle only was hypertrophied. It may then be fairly inferred from the above recorded facts that the disease known as chronic mediastinitis or indurative mediastino-pericarditis does not, in the majority of the cases, take its origin in an inflammation primarily affecting the heart, although in some instances changes occur in the surrounding tissues which are sufficient to call forth such increased action of its muscular walls as to lead eventually to hypertrophy and occasionally to great hypertrophy.

On the other hand, the mediastinal changes may be present to an extreme degree and yet the heart may at death have been healthy, as is recorded in one of Dr. Harris's cases and in two of those from the records of St. George's Hospital. Further, in Case 1 and Case 3 given in the first part of this paper the heart was smaller than natural. In these cases the diminution in size was in all probability the result of arrested development, and it may be assumed, although there is nothing in the history of these two cases to establish the fact, that inflammatory processes commenced early in life outside the heart itself, leading to chronic thickening of the pericardium, obliteration of its cavity, and arrest of the growth of the heart. Dr. Chevers[3] from his own observations came to the conclusion that complete obliteration of the pericardial cavity as a result of inflammation when uncomplicated by valvular disease caused diminution rather than increase in the size of the heart, the diminution in size being due to strangulation. Sir Samuel Wilks remarks in his article on Adherent Pericardium in Guy's Hospital Reports, 1871, vol. xvi., p. 201, that "there can be little doubt that these tough pericardial adhesions when occurring at an early period of life do impede the heart's action and in all probability its growth, ..... that the chronic inflammatory process very often involves the vessels entering the heart within the pericardium, but that when the latter is adherent the thickening and induration proceeds, as would a growth, to involve the cellular tissue in the mediastinum and, creeping upwards, to surround even the veins in the neck." Dr. J. H. Broadbent in his treatise on Adherent Pericardium, 1895, p. 22, says: "The explanation why the heart should be of normal size would be that it had not dilated during the original attack of pericarditis, or else that it had recovered from the dilatation before adhesions were formed."

*Pericardium.*—In Dr. Harris's cases it was not adherent internally in two cases and was adherent in 21 cases; no details are given in two cases. In Sir Samuel Wilks's case it was adherent. No details are given in Sir William Gull's case. It was adherent in Dr. Olliver's case, in Dr. F. Taylor's case, in Dr. Blumfeld's case, and in Dr. Habershon's case. In the St. George's Hospital cases it was adherent extensively; the cavity was obliterated in two cases and not entirely obliterated in two cases.

As the name "mediastino-pericarditis" suggests, the pericardium is usually more or less affected by the chronic inflammatory process and in the majority of the cases the cavity is either partially or entirely obliterated by fibrous adhesions. There were no adhesions between the parietal and visceral layers in two of Dr. Harris's cases.

*Pulse.*—In Dr. Harris's cases the pulse when recorded was always over 100. In Dr. Habershon's case the pulse was 70, irregular, feeble, and compressible. In Dr. Buchanan's case pulsus paradoxus was present—the rate was not recorded; it was of low tension. In Sir Samuel Wilks's case pulsus paradoxus was present, small, usually about 100. In Dr. Olliver's case the pulse was 96; no peculiarity was mentioned. In Dr. Sutherland's case the pulse was soft; no peculiarity was mentioned. In Dr. F. Taylor's case the pulse was from 96 to 104, regular, feeble, and compressible. In Dr. Blumfeld's case the pulse was 80. In Dr. Habershon's case the pulse was 70, irregular, feeble, and compressible. In Sir William Gull's case there are no details. In the St. George's Hospital cases in Case 1 the pulse was 82 when the patient first came under observation; at the end the rate exceeded 100 and remained so, small. In Case 2 the pulse was 94 on the only occasion on which the rate was recorded, full. In Case 3 the pulse was intermittent; on ten days it was over 100; on one day it was 143. In Case 4 no mention of the condition of the pulse was made.

*Pulsus paradoxus* occurred in Weidenmann's case quoted by Dr. Harris, in which the large vessels were embedded in fibrous tissue; in Kussmaul's case, quoted by Dr. Harris, in which the arch of the aorta, the pulmonary artery, and the superior vena cava were compressed by fibrous tissue; in Kussmaul's second case, quoted by Dr. Harris, in which it is stated that "firm and old adhesions of the exterior of the pericardium to the surrounding parts" existed; in F. Kipp's case, quoted by Dr. Harris, in which "the upper part of the mediastinum presented very little change"; in Bauer's case, quoted by Dr. Harris, in which no constriction of the large vessels was found; in A. Fox's case, quoted by Dr. Harris, in which no mention is made of constriction of large vessels; in Hutton's case, quoted by Dr. Harris, in which large vessels were compressed; in Dr. Harris's case, in which no mention is made of constriction of large vessels; and in Dr. Buchanan's case, in which no necropsy took place. The pulse-rate in all the recorded cases is found to be in excess of what is normal. Thus, in those collected by Dr. Harris in which the rate is given it is always over 100 beats in the minute. In Dr. Olliver's case it was 96; in Sir William Gull's and Dr. Buchanan's the rate is not mentioned. In Dr. Blumfeld's case it was 80, in Dr. F. Taylor's it was from 96 to 104, in Dr. Habershon's it was 70, and in Sir Samuel Wilks's it was 100. Of the St. George's Hospital cases in all the rate was above normal and in one (Case 3) it reached 143.

Pulsus paradoxus occurred in nine only of the cases included in this paper. In four of them the fibrous growth included the large vessels; in two cases it is distinctly stated that the large vessels were not so involved; in two cases no mention is made of any such condition, the inference being that the large vessels were free. In Dr. Buchanan's and Dr. Sutherland's cases no necropsy took place. This analysis shows that in 50 per cent. of the cases in which pulsus paradoxus was observed no constriction of the large vessels by fibrous growth existed—a fact which refutes Kussmaul's theory that pulsus paradoxus is of great diagnostic significance in this particular pathological condition.

*Kidneys.*

| *Harris's cases.* | Cases. |
|---|---|
| Healthy ... ... ... ... ... | 3 |
| Large and congested ... ... | 4 |
| Congested ... ... ... ... | 3 |
| Pale ... ... ... ... ... ... | 1 |
| No record ... ... ... ... ... | 14 |
| *Other cases.* | |
| Buchanan's case, healthy clinically ... ... ... ... | 1 |
| Habershon's case, healthy ... | 1 |
| *Other cases (continued).* | Cases. |
| Gull's case, healthy ... ... | 1 |
| Olliver's case, congested ... | 1 |
| Wilks's case, no mention ... | 1 |
| Blumfeld's case, congested (venous) ... ... ... ... ... | 1 |
| F. Taylor's case, small and healthy ... ... ... ... ... | 1 |
| Sutherland's case, healthy clinically ... ... ... ... | 1 |

*St. George's Hospital cases.*—In Case 1 the kidneys were natural. In Case 2 they were large and congested, weighing 21 ounces; the cortex was increased. In Case 3 the united weight of the kidneys was nine and a half ounces; they were firm and congested. In Case 4 a few small cysts were present, but otherwise the kidneys were natural.

It is unfortunate that in as many as 14 of the cases collected by Dr. Harris no mention is made of the morbid anatomy of the kidneys. Of the remaining 22 cases recorded in this paper, in eight the kidneys are distinctly mentioned as having been healthy; in six they were congested but

[3] Quoted by Sir Samuel Wilks in Guy's Hospital Reports, vol. xvi., p. 201.

presumably not otherwise affected; in one case they were pale but no mention is made of organic disease; in one case they were, excepting that a few small cysts were present, healthy—that is to say, in 13 out of these 22 cases these organs were practically healthy. In one case they were large and congested. In one case (Case 3) they were firm and congested. In one case (Case 2) the organs weighed 21 ounces, were large and congested, with increase of the cortex. From the above analysis it appears that the affection chronic mediastinitis is, in this collection of cases under consideration, not associated with structural disease of the kidneys. As a matter of fact structural change in the kidneys is recorded in only one of these cases in which the morbid anatomy is described—viz., in that of Case 2, and even in this instance it is merely stated that the cortex was increased.

*Urine.*

| *Harris's cases.* | Cases. | *Other cases (continued).* | Cases. |
|---|---|---|---|
| Albumin present | 3 | Wilks's case, not mentioned | 1 |
| Albumin absent | 7 | Buchanan's case, absent | 1 |
| Not recorded | 15 | Sutherland's case, not present at first | 1 |
| *Other cases.* | | Olliver's case, a trace | 1 |
| Habershon's case, slight albumin | 1 | F. Taylor's case, a trace | 1 |
| Gull's case, not mentioned | 1 | Blumfeld's case, one-eighth albumin | 1 |

*St. George's Hospital cases.*—In Case 1 the urine occasionally contained a trace of albumin. In Case 2 the urine was of specific gravity 1004 and highly albuminous on admission; two months later its specific gravity was 1020 and it was free from albumin. In Case 3 the urine contained a trace of albumin. In Case 4 the urine was of specific gravity 1022, high-coloured, and free from albumin.

Albumin, it appears, is not a constant constituent of the urine, but is often present in this affection in greater or less quantity and is dependent upon the state of the circulation rather than upon organic changes in the kidneys. The condition of the urine is not recorded in 15 of Dr. Harris's cases.

*Ascites.*

| *Harris's cases.* | Cases. | *Other cases (continued).* | Cases. |
|---|---|---|---|
| Ascites and general dropsy | 8 | Buchanan's case, no ascites, no dropsy | 1 |
| Dropsy | 10 | Olliver's case, no ascites, no dropsy | 1 |
| Ascites with slight œdema of legs | 1 | F. Taylor's case, ascites, dropsy | 1 |
| Ascites with œdema of arms | 1 | Blumfeld's case, ascites and dropsy | 1 |
| No ascites | 3 | Habershon's case, ascites and dropsy | 1 |
| No mention | 4 | Gull's case, not mentioned | 1 |
| *Other cases.* | | Sutherland's case, ascites | 1 |
| Wilks's case, abdomen distended | 1 | | |

*St. George's Hospital cases.*—In Case 1 there were ascites and some honeycomb perihepatitis. Behind the peritoneum in front of the aorta and inferior vena cava there was a considerable amount of fibrous tissue, involving the semilunar ganglia. In Case 2 there was probably no ascites and no mention is made of any peritoneal changes. In Case 3 ascites was present and the peritoneum was "injected." In Case 4 there was ascites; the peritoneum was opaque and thickened where it was in contact with the abdominal walls; there were many diffused areæ of dark colour.

The presence or absence of ascites is definitely recorded in only 21 of the total number of cases. In 16 of these it was present and in five it was absent, thus showing that this particular complication is present in a very great proportion. The ascites was accompanied by chronic thickening of the peritoneum, unconnected with cirrhotic changes in the liver, unless the patient had been addicted during life to the abuse of alcohol as reference to the following table clearly shows. It is evident, then, that in the disease known as chronic mediastinitis a chronic inflammation of the peritoneum frequently occurs the cause of which is not at present made out.

*Liver.*

| *Harris's cases.* | Cases. | *Other cases (continued).* | Cases. |
|---|---|---|---|
| Enlarged, "nutmeg" | 9 | Olliver's case, congested | 1 |
| Enlarged and congested | 2 | F. Taylor's case, compressed, capsule thickened | 1 |
| Enlarged | 4 | Blumfeld's case, "nutmeg" and fatty | 1 |
| Congested | 1 | Sutherland's case, much enlarged (clinically) | 1 |
| Nutmeg, not enlarged | 1 | *St. George's Hospital cases.* | |
| Rounded in shape, 59 oz., capsule thickened | 1 | Case 1, enlarged, "nutmeg," capsule thickened | 1 |
| Not recorded | 7 | Case 2, enlarged | 1 |
| *Other cases.* | | Case 3, "nutmeg," 49 oz. | 1 |
| Wilks's case, "nutmeg" | 1 | Case 4, cirrhosis, 72 oz. | 1 |
| Habershon's case, healthy | 1 | | |
| Gull's case, healthy | 1 | | |

In eight of the 36 collected cases no information is forthcoming as to the condition of the liver, and of the remainder enlargement or the nutmeg appearance due to venous obstruction was found in 23; in one case the organ was pale and fatty; in one it was in a state of cirrhosis and considerably heavier than normal (72 ounces); in one it is described as having been rounded in shape, its capsule thickened, and its weight 59 ounces. In the case in which cirrhosis existed the condition was the result of the abuse of alcohol. The condition of the liver in a large proportion of these cases is attributable to cardiac dilatation or failure, or to inefficiency on the part of the heart generally, as the result of its arrested development.

*The spleen.*—In nearly half (15) of the cases details are wanting as to the morbid appearances of the spleen and of the remainder the condition at the necropsy varied. In four cases it is stated to have been healthy; in five instances it was enlarged and in one of these it weighed as much as 17 ounces. This patient had been a hard drinker and suffered from cirrhosis of the liver. In two cases the only recorded lesion is a thickened capsule; in one case the organ was enlarged, soft and friable; in seven cases it was firm and congested, but, so far as the records show, not enlarged.

*Condition of Pleuræ.*

| *Harris's cases.* | Cases. | *Other cases.* | Cases. |
|---|---|---|---|
| "Fibrinous mediastinitis" | 1 | Olliver's case, adhesions to pericardium, chest wall, and diaphragm | |
| Adhesions to chest wall and to pericardium | 7 | F. Taylor's case, adhesions to pericardium and chest wall | 1 |
| Adhesions to pericardium | 3 | Blumfeld's case, adhesions to pericardium and chest wall | 1 |
| Adhesions to surrounding parts | 2 | Sutherland's case, left pleurisy and effusion clinically | 1 |
| Pleuritis | 1 | Habershon's case, fluid in both | 1 |
| Adhesions and small amount of fluid | 2 | Gull's case, right much thickened | 1 |
| Cavities obliterated | 1 | Wilks's case (No. 5 in the table), no mention | 1 |
| Dense fibrous tissue in upper part of mediastinum | 1 | Buchanan's case, no mention | 1 |
| No adhesions | 1 | | |
| Adhesions to pericardium and diaphragm | 1 | | |
| Adhesions to chest wall and mediastinum | 1 | | |
| Adhesions to pericardium, chest wall, and diaphragm | 1 | | |
| No mention | 3 | | |

*St. George's Hospital cases.*—In Case 1 the left pleural sac was quite full of fluid; there were old adhesions posteriorly, especially at the upper part. The right pleural sac contained about a pint of serum in the upper part; the lower part of the cavity was obliterated by fibrous adhesions. In Case 2 all the structures in the thorax were matted together by old adhesions. In Case 3 the right pleural cavity contained about a pint of fluid; the left pleural cavity contained a little fluid and there were "some" old adhesions. In Case 4 there were extremely dense adhesions in the left pleural cavity, especially at the lower part; these adhesions constituted a fibrous investment of the lung half an inch in thickness in the vertebral groove.

Of the cases collected in this paper that of Case 1 already mentioned is especially interesting, as showing (1) that very extensive pathological changes may have been in progress probably for many years, involving such important structures as the pleuræ and pericardium without giving rise to any symptoms indicating a departure from good health; and (2) in the absence of any previous disease likely to have given rise to such changes. In the present state of our knowledge it is impossible to give any satisfactory explanation of the pathological condition found in this case. Equally interesting is Dr. Blumfeld's case, in which the disease occurred in an infant at the early age of 15 months. In this case the cause of the chronic mediastinal inflammation was presumably due to the caseation of the bronchial glands. The history of the cases furnishes no data as to the probable date of the commencement of the mediastinitis, but in Dr. Blumfeld's case it seems improbable that connective-tissue development so great as to cause thickening of the pericardium to the extent of three-quarters of an inch can have been due to an attack of bronchitis, from which the child suffered four months before death.

*Diagnosis.*—The diagnosis of this particular affection is a matter of considerable difficulty, often on account of the effusion which occurs in the serous cavities. As evidence of this difficulty it may be mentioned that Dr. Taylor's case was under his own observation constantly and under that of one of his colleagues for a period of three weeks and that cirrhosis of the liver was at one time thought to be the explanation of the symptoms and physical signs. Further, in my own case (Case 1) a consultation of the physicians took place without any definite diagnosis being made. Subsequent consideration, however, of the case showed that one fact which was observed when the patient was first admitted—viz., the fulness of the face and the œdema of the thoracic walls—

was insufficiently appreciated. At the same time it may be remarked that the dyspnœa on exertion, the dusky complexion, the cyanosis of the lips, and the general dropsy seemed amply explained by failure of the right side of the heart. Moreover, the effusion into the pleural cavities deprived one of the information usually afforded by percussion of the cardiac area and by the determination of the exact position of the heart's impulse. Dr. F. Taylor[10] remarks "that a mediastinitis with adhesions or matting could only be suspected if the upper limbs or face or neck were quite exceptionally or perhaps quite early involved." This statement is, as it seems, borne out by Case 1 recorded in the first part of this paper and by the case under Dr. Blumfeld's care already mentioned. Puffiness of the face, therefore, cyanosis of the lips, œdema of the thoracic walls occurring as Dr. Taylor says exceptionally or quite early, are important points in the diagnosis of the disease, chronic mediastinitis. In his clinical lecture on this disease Dr. G. A. Sutherland[11] calls attention to prominence of the veins of the arms and neck, puffiness of the face, and duskiness of the lips, cheek, and tongue, and to the fact that ascites was, as in many of these cases, an early sign of this particular affection.

*Treatment.*—From the nature of the disease it is clear that treatment either medical or surgical is of little avail when the pathological condition is fully established. It is probably impossible in the earlier stages of the disease to ascertain that the fibrous induration has begun in the structures around the heart and in the mediastinum. The remarkable absence in some of the recorded cases of any antecedent illness or of any symptoms of so serious a disease until a comparatively short period before the fatal termination, preclude the possibility of any prophylactic measures. Up to that period some of the patients enjoy good health and do not therefore come under the observation of a medical practitioner. The condition is, in fact, occasionally entirely without symptoms until indications of cardiac failure occur and it is then irremediable. In some instances it has probably commenced in early life and so it emphasises the necessity for special care in the management of the convalescence of children who may be the subjects of acute rheumatism. It only too often happens that when the acute stage of rheumatic fever has passed the necessity for prolonged rest is overlooked and the child is allowed to leave its bed and resume its active habits before the affected structures have recovered from the damage done to them, before the processes of inflammation, both inside and outside the pericardium, have subsided. In either case from want of sufficient rest recovery from these morbid states may be either retarded or prevented; a chronic inflammation may be established the event of which may in some instances be chronic mediastinitis or indurative mediastino-pericarditis.

TABLE GIVING PARTICULARS OF 12 CASES OF CHRONIC MEDIASTINITIS IN 10 OF WHICH A NECROPSY WAS MADE.

| No. of case. | Source whence case was obtained. | Age. | Sex. | Previous history and mode of onset. | Duration. | Variety. |
|---|---|---|---|---|---|---|
| 1 | St. George's Hospital. | 25 | F. | The only known illness was measles when a child. There were no symptoms till 6 weeks before admission into hospital on May 12th, 1896. | 12 months less 12 days. | Mediastino-pericarditis (pericarditis interna and externa). |
| 2 | St. George's Hospital. | 31 | M. | A heavy drinker. His health was good up to 6 months before admission. | 8 months. | Mediastino-pericarditis (pericarditis interna and externa). |
| 3 | St. George's Hospital. | 34 | M. | No illness till influenza in 1892. | 6 weeks. | Mediastinitis (pericarditis externa and interna). |
| 4 | St. George's Hospital. | 55 | M. | Formerly a soldier; he had never served abroad. He was a heavy drinker. He had had bronchitis since 1888 and dropsy in 1889. He had never had rheumatism to his knowledge. He had had jaundice some time before admission. | 7 years. | Mediastinitis (pericarditis interna and externa). |
| 5 | Sir Samuel Wilks: Guy's Hospital Reports, 1871, Third Series, vol. xvi., p. 204. | 9 | M. | Always a sickly lad. He had never had rheumatism. He had had scarlet fever 3 years ago. For 6 weeks before admission he suffered from symptoms of heart disease. | 6 weeks. | Pericarditis interna. |
| 6 | Dr. R. J. Buchanan: "A case of early indurative mediastino-pericarditis with pulsus paradoxus," Liverpool Medico-Chirurgical Journal, 1896, vol. xvi., p. 325. | 21 | M. | No serious illness till 1892, when he had what was considered to be an attack of influenza; he was laid up 2 or 3 weeks. There was no definite history of rheumatic fever. He was temperate in the use of alcohol. | 2 years. | Mediastino-pericarditis |
| 7 | Dr. E. Olliver: New York Medical Journal, Jan. 19th, 1895. | 50 | M. | Nothing could be learned of his history. He had been a hard drinker up to 3 years ago. Then cough, especially at night, came on with thick yellowish expectoration; some time after he became short of breath and asthmatic on exertion. About July 1st, 1894, his urine became scanty and his appetite bad. He gradually became weaker and on August 18th, 1894, entered St. Peter's Hospital practically exhausted, partly owing to very meagre surroundings. | 3 years. | Pericarditis externa and interna. |
| 8 | Dr. F. Taylor: THE LANCET, Oct. 29th, 1898. | 42 | F. | Scarlet fever 4 years before admission into Guy's Hospital. 2 months previously to admission an adeno-myxoma was removed from the left breast. | 11 months. | Mediastino-pericarditis (pericarditis externa and interna). |
| 9 | — | 15 months. | M. | He had had bronchitis 2 months previously to admission. He had swelling of the face and legs 2 months previously to admission on Oct. 1st, 1896. | 3 months. | Mediastinitis (pericarditis interna and externa). |
| 10 | Sir William Gull: Guy's Hospital Reports, Third series, vol. v., 312. | 61 | M. | He had been ill for 4 months. The symptoms were sharp pain in the right side; there was no cough. | 4 months. | — |
| 11 | Dr. Habershon: Transactions of the Pathological Society, vol. xxvii., p. 79. | 37 | M. | He had had variola when young. He was quite well till 7 years before his admission in June, 1874. | 7 years. | Mediastinitis. |
| 12 | Dr. G. A. Sutherland: THE LANCET, Jan. 8th, 1898. | 8 | M. | He had had pleurisy with effusion 3 years previously and rickets in infancy with bronchitis. | Some months. | — |

[10] Loc. cit. [11] THE LANCET, Jan. 8th,

## REMARKS.

### CASE 1.

*Pathological appearances.*—Fibrous mediastinitis. There was fluid in both pleuræ; the left was quite full. Old adhesions obliterated the lower part of the right. The edges of the lung were adherent to the right auricle and slightly to the right ventricle. The cavity of the pericardium was obliterated by old adhesions. The pericardium was much thickened, especially anteriorly; the heart was compressed; the walls were pale and soft and were not invaded by fibrous tissue. The valves, slightly opaque, were efficient. There was excess of fibrous tissue in the anterior mediastinum causing adhesions to the sternum. There was excess of fibrous tissue in the posterior mediastinum. The œsophagus was adherent to the bronchial glands. The capsule of the liver was thickened; it was in a "nutmeg" condition, flabby, soft, and fatty. There was no cirrhosis. The liver was enlarged. Ascites was present, also general anasarca. There was no compression of the large vessels at the base of the heart.

*Chief symptoms, physical signs, and cause of death.*—There were dyspnœa and cyanosis. No cardiac impulse could be felt and no "pulsus paradoxus" was noticed. Occasionally there was a trace of albumin in the urine which was otherwise healthy. Hæmoglobin was deficient in the blood. There was Cheyne-Stokes breathing on one occasion (July 11th, 1896). Paracentesis thoracis et abdominis was performed on several occasions and pain was present in the side of the right chest after tapping the abdomen. Several fainting attacks occurred about Dec. 7th, 1896. There was no distension of the jugular veins. The pulse was from 82 to 108.

### CASE 2.

*Pathological appearances.*—Fibrous mediastinitis. The contents of the thorax were all matted together; the pleural cavities were obliterated. The pericardium was much thickened and its cavity was almost entirely obliterated. The heart was healthy. The lower part of the left lung was solidified (? fibrous induration). There was great increase of fibrous tissue in the mediastina. The liver was enlarged; it weighed 80½ oz. and was gorged with blood. The kidneys were very large (21 oz.) and congested. The cortices were much increased.

*Chief symptoms, physical signs, and cause of death.*—The patient had jaundice six months before admission. He had been a heavy drinker. The jaundice was soon followed by dropsy and dark-coloured urine. Respiration was deficient at the base of the left lung with dulness. Crepitations were heard over both lungs. The area occupied by the liver was increased. The specific gravity of the urine on admission was 1004, highly albuminous. On Dec. 21st it was free from albumin but was very alkaline and abundant. The specific gravity was 1022. The jaundice increased and the patient became feverish before death.

### CASE 3.

*Pathological appearances.*—The costal cartilages were calcified. There was blood-stained fluid in the right pleura. Old adhesions were present on the left side and a little fluid. The lower lobe of the right lung was compressed. There were firm fibrous adhesions all round the base of the heart. The pericardium was adherent to the left lung by old fibrous tissue. The parietal layer was greatly thickened in front of the apex. There was effusion of bloody fluid. There were firm adhesions round both auricles. The heart was small. The visceral layer of pericardium was much thickened. The valves were healthy. Ascites was present. The intestines were congested. The kidneys weighed 4½ oz. conjointly.

*Chief symptoms, physical signs, and cause of death.*—Dyspnœa was present six weeks before admission. There was swelling of the legs 12 days before admission; also evidence of fluid in the right pleura. The heart's apex could not be found. The pulse was soft and irregular. There was a trace of albumin in the urine. The pulse became intermittent four days after admission. Dropsy and ascites rapidly increased. Death occurred about 10 weeks from the commencement of the symptoms.

### CASE 4.

*Pathological appearances.*—There was great dropsy, also some jaundice. There were very dense adhesions in the left pleural cavity so firm that the lung could only be removed by the knife. Fibrous tissue was especially thick in the posterior mediastinum. The cavity of the pericardium was obliterated. Fibrous tissue was very thick over the base of the heart and arch of the aorta. The heart valves were healthy. The right auricle was enclosed by dense fibrous tissue. There was much ascites. The liver weighed 4 lb. 8 oz. There was excess of fibrous tissue throughout the organ. The spleen weighed 17 oz.; it was firmly adherent to the liver. There were a few small cysts in the kidneys.

*Chief symptoms, physical signs, and cause of death.*—The patient was slightly jaundiced. There was much ascites. The superficial veins on the abdomen were dilated. Rhonchi and râles were present in the chest with bronchial expectoration. The heart's first sound was loud; the organ was somewhat enlarged. The liver was more than a hand's breadth below the costal cartilage. The legs were œdematous. The urine was highly coloured; there was a trace of albumin before death. The spleen was enlarged. Paracentesis abdominis was performed 26 times in all. There was evidence of some mediastinal condition causing obstruction to the return of blood by the superior vena cava with dulness of the thorax. Gradually the patient became more waterlogged.

### CASE 5.

*Pathological appearances.*—The pericardium was generally adherent and much thickened, the inflammatory thickening surrounded the roots of the vessels. The pericardium together with the adhesions were as thick as the walls of the heart. The left ventricle was thin and small; the muscle was good. The walls of the right ventricle were infiltrated with fibrous material, as also were the walls of the right auricle. The valves were healthy. The vena cava and veins in the neck were not encroached upon. The liver was of the "nutmeg" kind.

*Chief symptoms, physical signs, and cause of death.*—There were dyspnœa and cyanosis. There was no bruit. The heart sounds were natural. The pulse was small, usually about 100. The respirations were 56. Dropsy was present.

### CASE 6.

*Pathological appearances.*—The result of this case was not recorded.

*Chief symptoms, physical signs, and cause of death.*—There was general cyanosis. No œdema was present. The temperature was normal; the skin was clammy; and the pupils were dilated. The heart's impulse was exaggerated, rapid, undulating, with a marked thrill over the præcordial region. There was no sinking or retraction of the intercostal spaces. Cardiac dulness increased in all directions, especially to the right. There was a systolic murmur over the pulmonary cartilage, also over the aortic cartilage; the second sound was accentuated. There was a presystolic murmur over the fourth left interspace and rib. There was no murmur at the apex. The impulse was in the fifth space, four inches from the mid-sternum. There was a loud systolic bruit over the right trapezius, also over the left. The veins of the neck were distended but not altered by respiration. The pulse was irregular and of rather low tension; paradoxus. The lungs were normal. There were dyspepsia and constipation. The liver, spleen, and urinary system were normal.

### CASE 7.

*Pathological appearances.*—The pleuræ were greatly thickened, firmly adherent to each other, to the chest walls, and to the diaphragm. The lungs were emphysematous and their bases were congested. Fibrous changes were present in the right apex, where there were four or five small cavities rather smaller than a hazel nut. The pericardium was firmly attached to the surrounding structures; the two layers were greatly thickened and firmly adherent; the pericardial cavity was thus obliterated. The ventricular walls were fatty and thickened; the right ventricle was full of blood; the left ventricle contained a small clot. There was a small fibrous nodule on one of the aortic valves. There were three small patches of atheroma on the ascending aorta; the coronary arteries were atheromatous. The liver, spleen, and kidneys were congested.

*Chief symptoms, physical signs, and cause of death.*—The patient suffered from great weakness, short breath, cough (which was worse at night), yellow expectoration, and dizziness on rising from a chair or getting out of bed. There was loss of sleep and of appetite. He was constipated. The urine was scanty; the specific gravity was 1015, with urates and a trace of albumin; there were no casts. Speech was sluggish and the patient was stupid. There was some emaciation; the skin was pale, bloodless, and slightly dusky. The tongue was slightly coated. The chest was barrel-shaped. The epigastric angle was obtuse. The respirations were accelerated; there was marked abdominal breathing; the chest moved up and down with respiration. There was retraction of the intercostal spaces on inspiration over the lower parts on both sides. The apex beat was not seen. There was dulness over the right apex, otherwise hyperresonance over both lungs. Cardiac dulness was slightly increased. The liver and spleen dulness were normal. There were harsh respiration with prolonged expiration over both lungs; there were bronchial breathing over the right apex, sonorous and sibilant rhonchi over the front and back, and fine moist râles occasionally over the right apex. The heart sounds were very feeble; the pulmonary second sound was accentuated; the apex beat was very faint, but was heard in the fifth left space three and a half inches from the mid-sternum. There were no murmurs. The pulse was 96 and the temperature was 98° F. There were dyspnœa, dizziness, attacks of asthma, and slight delirium. The patient died on Nov. 21st, 1894.

### CASE 8.

*Pathological appearances.*—Fibrous mediastinitis. The structures in the thorax were all matted together. Two layers of pericardium were adherent and much thickened. The lungs were compressed and airless except at the apices. The bronchial tubes were dilated at the left base. The bronchial glands were natural. The right auricle was dilated and the right ventricle was dilated and hypertrophied. The left ventricle was small, not hypertrophied. The valves were healthy. There were chronic and recent peritonitis. The liver was compressed and the capsule was thickened. There was a calculus in the gall-bladder. The spleen was small and hard; its capsule was thickened. The kidneys were small and healthy.

*Chief symptoms, physical signs, and cause of death.*—There were swelling of the abdomen, cough, and dyspnœa. The face was swollen; there was œdema over the sacrum, legs, feet, and face. There was dulness over both bases; fremitus was deficient. The vesicular murmur was absent at both bases. The pulse was from 96 to 104, regular, feeble, soft, and compressible. The impulse of the heart could not be seen; it was just felt in the fifth interspace one inch below the nipple and half an inch internal to it. There was no murmur. The abdomen was tense, slightly swollen, with œdema of the skin on the left side. There was dulness on both sides, but no change on alteration of position. The temperature was from 99·4° to 102° F. There was a trace of albumin in the urine. There were gradual increase of dropsy and persistence of physical signs in the chest. The respirations were from 38 to 50. Towards the end rigors occurred and an increase of thoracic dulness, drowsiness, collapse, death.

### CASE 9.

*Pathological appearances.*—Fibrous mediastinitis. The pericardium was three-quarters of an inch thick. Fibrous tissue involved the great vessels. The valves were healthy; the ventricles were dilated and hypertrophied (Transactions of the Pathological Society, vol. xlviii., p. 41). The liver was "nutmeg" and fatty. There was venous congestion of the spleen and kidneys. The mediastinal glands were caseous. Ascites was present (four pints). There was no evidence of tubercle save in the caseous glands.

*Chief symptoms, physical signs, and cause of death.*—There were bronchitis and swelling of the face and legs. The temperature was 99° F., the respirations were 20, and the pulse was 80 and regular. Cardiac dulness extended to the upper border of the second intercostal space and beyond the middle line of the sternum. The heart sounds were normal, the chest movements were normal, and the breathing was normal. There was no evidence of ascites for a month and then much. The arms and legs became blue and œdematous. The liver was two and a half inches below the costal arch. The urine was phosphatic, one-eighth albumin.

### CASE 10.

*Pathological appearances.*—The cavity of the right pleura was obliterated. There were fibrous induration and thickening around the bronchus implicating the right vagus and pulmonary plexus. The smaller divisions of the bronchi were dilated up to the periphery of the lung. There were grey and iron grey hepatisation of the lung. In the lower lobe was a large sloughing cavity from softening of the indurated

tissue. The pleura was greatly thickened. The left lung was healthy. The heart and abdominal organs were healthy.

*Chief symptoms, physical signs, and cause of death.*—The patient was admitted on Jan. 12th, 1859. He was much emaciated and of cachectic aspect. The right chest was quite dull and flattened; the infra-clavicular region was depressed. No respiratory or bronchial sounds were audible. There were no vocal resonance, no vocal fremitus, and no hæmoptysis. The left side was resonant. There were râles in the large tubes. Expectoration was muco-purulent. He died on June 19th, 1859.

CASE 11.

*Pathological appearances.*—Fibrous mediastinitis. With regard to the pericardium there were old adhesions around the great vessels and at the base of the heart. The heart was enlarged. There were fibrous changes in its walls, one pulmonary valve was absent and here the greatest amount of mediastinal change was found. The left ventricle was hypertrophied and the aorta was atheromatous. The anterior jugulars and large veins behind the sternum were dilated. The left superior cava was obliterated (? congenitally). The axillary and subclavian were dilated. There were pneumonia of the lower lobe of the left lung and œdema of the lower lobe of the right. The liver weighed 59 oz.; its capsule was thickened; the organ was healthy. The capsule of the spleen was thickened the kidneys were healthy. There was chronic peritonitis with ascites. The peritoneum was much thickened.

*Chief symptoms, physical signs, and cause of death.*—The patient had a sudden attack of swelling of the face and neck in 1867; he was unable to work for two years and then did light work till admission in June, 1874, when he had ascites, œdema of the arms and lividity of the face and head. On stooping the lips and ears became purple. The heart's action was feeble; the sounds were distant, the first was almost inaudible; the impulse was scarcely perceptible. The area of cardiac dulness increased. The pulse was 70, irregular, feeble, and compressible. The anterior jugular veins and the veins on the anterior surface of the abdomen were much dilated. A large vein passed across the trachea. Ascites was present. The temperature was 98·6° F. and the respiration was 20. The urine was scanty, highly coloured, of specific gravity 1030, and loaded with urates; it was slightly albuminous but free from sugar. Syphilis and abuse of alcohol were denied; there was no evidence of the former. He died on April 10th, 1875.

CASE 12.

*Pathological appearances.*—There was no post-mortem examination.

*Chief symptoms, physical signs, and cause of death.*—The patient was thin; there was puffiness of the eyes; the cheeks, lips, and tongue were dusky. There was no dropsy on admission, but much ascites. The respirations were short and rapid; there was no dyspnœa or cough. Expansion of the chest was limited; percussion was impaired. Respiration was harsh posteriorly and in front. Cardiac impulse was imperceptible; the area of dulness apparently was not enlarged. The sounds were weak and regular; there was no evidence of valvular or other organic disease of the heart. The urine was healthy. The spleen was probably not enlarged. There was gradual increase of ascites; the heart became weaker and irregular with dyspnœa. The face was more puffy and cyanosed and albumin was present in the urine. The liver was enlarged downwards to the level of the umbilicus. "The abdominal wall seems thickened as if from peritonitis." Cough was paroxysmal, causing hæmorrhage in the lids and under the conjunctiva and vomiting. There was œdema of the chest wall; the veins over the upper part of the thorax were dilated. There was pleuritic friction on both sides but no pain; also dulness over the anterior mediastinal region and harsh bronchial breathing. The abdomen was tapped 11 times.

Grosvenor-street, W.

# REMARKS UPON EXPLORATORY OPERATIONS UPON THE STOMACH FOR OBSCURE AND OBSTINATE GASTRIC SYMPTOMS,

## ILLUSTRATED BY A CASE OF GASTRORRHAPHY FOR DILATED STOMACH.[1]

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IN 1895, when writing the article upon Diseases of the Stomach in my work upon "The Surgery of the Alimentary Canal," I ventured to predict that the time was not far distant when we should think as little of exploring the stomach without and within as we then thought of examining the brain in cases presenting obscure and indefinite cerebral symptoms. While it is still not possible to say that that time has yet arrived one can safely assert that considerable advance along such lines has been made in recent years. The way has been largely paved by the success which has followed the treatment of gastric ulcer and tumours involving the gastric parietes. We know how successfully and with what surgical simplicity an ulcer or tumour may be excised and the wound united by simple suture. If in a diseased area, accompanied frequently with grave complications, we can successfully operate upon the stomach, it is only reasonable to suppose that with all our modern precautions and complete equipments we may still more successfully operate upon a comparatively normal region or organ; in other words, that we may cut down upon the stomach, incise its walls, explore its cavity, and stitch it up again without any fear of producing results which would militate against any such endeavour, even when the investigation proved purely negative. Indeed, such treatment on the healthy stomach is now frequently resorted to by surgeons and with the best possible results for the ends in view. Thus in cases, for instance, of intractable stricture of the œsophagus it is found possible to successfully dilate the constriction from below through the stomach when it is impossible to do so from above through the mouth.

If, then, we may safely assert that no harm need follow an operation upon the stomach for purely exploratory purposes the question next arises, What are the circumstances connected with any case which might reasonably be benefited by such an investigation? I think I am right in saying—although it is only the expression of the opinion of a surgeon—that very many cases come before the physician in his hospital wards or the practitioner in his private practice which excite little more than a vague suspicion as to the true nature of the gastric symptoms of the patient; indeed, the obscurity and indefiniteness of the symptoms in some cases are such as even to defy an approximate approach to a diagnosis. Changes are rung upon every stomachic remedy. Lavage is practised with a persistency which does credit to the forbearance of the patient, and yet improvement neither follows nor is any better knowledge obtained regarding the true cause of the patient's sufferings. I trust I am not drawing too exaggerated a picture of the physician's fruitless efforts. But I have heard it said by practitioners that few cases are more trying to their patience and endurance, more obstinate in resisting all remedial measures, than those of the particular class here referred to.

No doubt many chronic gastric troubles arise from causes which no operative intervention could possibly remove; but there is equally no doubt that there are many obstinate cases, many more, indeed, than is usually supposed, which could undoubtedly be operated upon with the best results. It is with the hope that these cases may be submitted to surgical treatment that I am endeavouring to hold out the practically safe measures which the surgeon is prepared to adopt in order to assist the practitioner, if not directly by curing his patient, at least in guiding him, it may be, into better and more suitable lines of treatment.

I feel that it would be somewhat beyond my sphere to attempt to indicate how many of these obstinate and indefinite gastric disturbances are brought about. Many are, of course, of a distinctly organic nature, such as early gastric ulcer (whether of an innocent or malignant character), commencing obstruction at the pylorus, &c. Conceive what bright prospects are held out for the life of the patient it may be if instead of persisting for months possibly in treatment by medication symptoms dependent upon early gastric carcinoma the case is submitted to exploratory operation. I do not wish to express too hopeful an opinion, but in the light of what we know about carcinoma in other parts of the body it is at least reasonable to suppose that early excision of a carcinomatous focus might end in permanent cure. As surgeons our experience at present is that hardly a case of gastric carcinoma is brought under our observation till the disease is so far advanced that a tumour can actually be felt through the abdominal parietes. I need hardly say that with comparatively few exceptions our operative treatment in this disease resolves itself into measures of a purely palliative character; we may alleviate the more troublesome symptoms, but we cannot effect a cure because our intervention is too late.

Then, again, there are classes of cases of a particularly obstinate and obscure character which from the absence of any more definite causes seem to indicate purely functional disturbance. They may be neurotic, whatever that may signify, but while they defy all the usual and conventional remedial measures succumb in some mysterious way to an exploratory operation.

Dyspepsia, I take it, is in some shape or form the all-embracing symptom of almost every gastric trouble. It is therefore significant of so many different complaints, both functional and organic, that the tendency is in the absence of any very distinct contra-indication to treat every case in the first instance as of the less serious class, and thus as being possibly functional to follow out in consequence some conventional line of treatment in the way of medicine and

[1] A paper read at a meeting of the Glasgow Medico-Chirurgical Society on March 17th, 1899.

diet. Doubtless in the vast majority of cases such treatment soon realises the best possible results and the rapidity with which recovery takes place sufficiently indicates the correctness of the diagnosis and the success of the treatment. There are few diseases, indeed, even of an organic nature which are not temporarily improved by the simple measures at first employed. In one sense it is unfortunate that it should be so because the deception thus wrought only serves to prolong the time for the pernicious advance of the disease and the delay of those measures which alone could be productive of permanent benefit. It is, indeed, difficult to say how long measures of a purely medicinal—or shall I say conservative?—character should be persisted in before operation should be advised. There must be a period, however, when the practitioner feels that his treatment is failing to produce the permanent good effects which he anticipated. I can only hope that the harmlessness and simplicity of the exploratory operation which I have briefly endeavoured to indicate will induce him not to persist longer in efforts obviously fruitless, but to be persuaded and to persuade his patient that an operation might serve to explain the persistency of the symptoms if not actually to cure or relieve the complaint.

Just as an illustration of what I mean, what can be more useless as regards permanent results, and I might add even more harmful, than the continuous daily lavage of a stomach which has become more or less permanently dilated, either from some obstructive pyloric disease or from some chronic defect in the digestive function of the organ? I use the expression "more harmful" advisedly, because I believe that whatever good may follow the removal of products likely to remain in the stomach and ferment the amount of fluid constantly thrown in has some deleterious mechanical effect in maintaining—if, indeed, it does not increase—the dilatation. But however this may be, a dilated stomach, irrespectively of the removal of the cause which may have produced it and irrespectively of the removal of that cause, will remain a source of persistent pain, discomfort, and dyspepsia with all their attendant ills and possibly subsequent dangers, and until that dilatation is efficiently dealt with no amount of lavage or medication will effect the necessary relief.

What, again, I may ask, can be more useless than the endeavour to alleviate symptoms dependent upon adhesions interfering with the normal freedom of movement of the organ? I must not, however, pursue this line of reasoning further. But before introducing the case which I trust will illustrate many of the points which I have brought forward I should like to add a few more facts in support of the contention herein set forth.

So recently as October of last year (1898) Professor Kocher of Berne, one of the most distinguished continental surgeons, pleaded for a more extended use of exploratory incisions in doubtful cases of gastric disease and in words the weight of which it is difficult to over-estimate he says: "I have regretted delay in operating often, in operating never." Keen of Philadelphia, in the Cartwright Lectures, delivered at the beginning of last year (1898), expressed his opinion in similar terms; "in any case," he says, "in which by other means at his command no positive diagnosis can be reached the surgeon is thoroughly justified in opening and exploring the stomach." I have in "Surgery of the Alimentary Canal"[2] quoted two cases in support of exploratory incisions into the stomach, one by Dr. Bradford and the other by Mr. Frederick Treves. In neither, strangely, was anything definite found and yet the immediate relief obtained in each case was marked. In Dr. Bradford's case the following operation was performed. An incision was made in the median line from the xiphoid cartilage downwards. The stomach was found to be somewhat distended, but without thickening. The appearance of the viscus was perfectly normal. Two fingers were inserted into the abdominal wound; the anterior surface was palpated, but no thickening or adhesions were discovered. The stomach was pulled from one side to the other so that the whole anterior surface could be palpated without difficulty. The lesser cavity of the peritoneum between the stomach and the large intestine was opened a short distance from the border of the former, two fingers were inserted beneath the stomach and two fingers of the other hand were placed so as to palpate the anterior surface. Between the two the posterior surface of the stomach could be extensively and thoroughly explored and also any thickening ascertained. No adhesions were found on the posterior surface and nothing which was abnormal was observed. The stomach was then incised to see if any small ulcerations existed. An electric light was inserted and the inside of the stomach was easily seen; neither by this nor by the fingers could anything abnormal be determined. The wounds were therefore sewn and dressed with the ordinary aseptic dressing. The patient made a good recovery and was relieved of all the symptoms.

I think you will acknowledge that this operation was a pretty thorough exploration of the stomach and yet not only did no ill-effects follow the performance of the operation itself, but, on the other hand, its influences seem to have been fraught with the very best results. The cause of the patient's sufferings were certainly mysterious, but equally mysterious must be considered the beneficial effects worked by the exploration. It is not, however, only in the case of the stomach that we are familiar with the beneficial effects of an operation which so far as could be gathered at the time seemed to have been perfectly negative in its object. The case attributed to Mr. Treves was as follows. A man, aged 40 years, who was admitted to the London Hospital had been ill, according to his own report, for 12 years with pain in the stomach and vomiting. He had vomited blood. He was greatly emaciated. The pain in the stomach was evidently very severe. The stomach was exposed by operation on Oct. 11th, 1895. It was much enlarged, but exhibited no abnormal appearance beyond this. The stomach was then opened and emptied. The pylorus was examined from within and every part of the gastric surface was explored. No ulcer or other morbid condition was discovered. The gastric and other abdominal wounds were closed. The patient seemed well and by January of the next year (1896)—that is to say, about three months after the operation—all pain in the region of his stomach had practically disappeared.

In this case, as in that under the care of Dr. Bradford, the operation was performed under the impression that the gastric symptoms were due to ulcer. The operations negatived any such supposition and although they failed to settle the question of diagnosis they apparently managed to cure or at least relieve the patients.

Mr. Mayo Robson, acting on lines somewhat similar, has by exploratory laparotomies discovered certain obscure gastric symptoms to be due to adhesions involving some part of the external gastric parietes the separation of which resulted in complete relief. The same surgeon, in a paper recently published in THE LANCET,[3] has shown that exploratory gastric operations have been the means of revealing obstruction at the pylorus as the cause of dilated stomach and that the treatment of this obstruction has led to the disappearance of all symptoms of tetany from which the patients had suffered.

Such, then, are some of the facts and opinions which I think tend to support and to encourage the views and practices which I am endeavouring to inculcate. And now let me ask your attention for the case which I have to show you this evening. My attention was first drawn to the patient by my colleague, Dr. Ebenezer Duncan, who expressed the difficulty which he had in determining what could be the cause of the patient's persistent gastric trouble. The prolonged suffering which he had endured made him readily consent to operation. Dr. Duncan proposed an exploratory laparotomy, but on hearing my arguments both he and the patient agreed that I should extend my operation to an exploratory gastrotomy if such should be considered advisable at the time of operating. Without further comment I will give the report of the case as taken by Dr. Charles Fleming and Dr. James McHaffie.

A man, aged 55 years, was admitted to the Victoria Infirmary on Sept. 6th, 1898, under the care of Dr. Ebenezer Duncan. He stated that his illness commenced about two years before by more or less pain in his back. At the time he thought that he was suffering from lumbago, but the pain soon shifted to the epigastrium where it has remained continuously ever since. He described it as a burning, gnawing character located mostly just below the ensiform cartilage. Its presence was very constant here though sometimes passing through to the back. It was somewhat aggravated by hunger and it was frequently relieved by the ingestion of food. He never vomited, but suffered considerably from flatulency. The bowels have always been costive, requiring

[2] Vide p. 174.

[3] THE LANCET, Nov. 26th, 1898, p. 1382.

aperients. To his knowledge he had never passed blood. An examination of the abdomen revealed some pain on pressure over the affected area and the stomach gave signs of being considerably dilated, extending an inch below the umbilicus and laterally as far as the left axillary line. The heart manifested a marked mitral murmur. The other organs appeared to be healthy. He had lost flesh considerably, his weight being 9 st. 4 lb. While in the medical ward he was treated with the usual gastric remedies and his stomach was washed out from day to day. As no improvement followed he was removed to the surgical ward. On Nov. 9th, 1898, he was admitted to Ward 3 under my care with the object of having an exploratory operation performed upon the stomach.

The abdomen was opened by a three- to four-inch incision above the umbilicus and the anterior surface of the stomach together with the pylorus were examined with the finger. Nothing of the nature of adhesions or other complications were detected. The stomach was then partially withdrawn through the parietal wound and its anterior wall was incised for about an inch in the long axis of the organ and about midway between its two curvatures. The pyloric orifice and the interior of the stomach were examined with the index-finger, but here also the result was negative. No constriction or thickening was felt at the pylorus, the apex of the finger being admitted easily into the opening. The internal lining of the organ, as far as it could be investigated, also appeared to be normal; there was no thickening or ulceration. The exploratory incision was then closed by a continuous Lembert suture and steps were taken to lessen the dilated stomach. After withdrawing the organ to as great an extent as possible a longitudinal fold in the anterior wall was tucked in and the two curvatures were approximated and secured by a series of interrupted Lembert sutures. The stomach was then returned and the abdominal parietal wound was closed by three separate rows of stitches—peritoneal, aponeurotic, and skin. The operation lasted 55 minutes.

After the operation the patient continued to vomit small quantities of blood-stained mucus and he complained of some pain in the epigastrium. At about 1 A.M. the next day he vomited something like eight ounces of pure blood. From that time onwards till 10 A.M. it was computed that he brought up at least 35 ounces of blood. His condition when seen by me was such as to indicate free hæmorrhage into the stomach from the gastric wound and the necessity of immediate removal of the patient to the theatre. An anæsthetic was administered and the exploratory incision into the stomach was at once exposed by the removal of all stitches. It was then found that some small veins were bleeding at the margin of the incision. These were secured, the edges of the mucous membrane were stitched together, and a continuous Lembert suture was applied to the peritoneal coat. The gastric plication was re-sutured and the abdominal wound was re-closed. The median cephalic vein was now opened and three pints of hot normal saline solution were injected. The pulse and respiration at once commenced to improve. Finally, the patient's stomach was freely washed out, much blood-clot being thus removed. From this period onward uninterrupted improvement took place and he left the infirmary about two months later for the convalescent home at Largs. On Feb. 10th, 1899, he came to the infirmary to report himself. He had put on flesh, was feeling strong, was quite free from his old pain, and was taking his food well. When last seen on March 15th the improvement had still continued and his weight then reached 11 st. 4 lb. against 9 st. 4 lb. when he left the infirmary.

In reviewing the case and its treatment it will be observed that the operation verified the diagnosis of a dilated stomach and, further, that it proved the absence of any gross lesion which could explain the dilatation. This latter information paved the way for the treatment adopted. The case was then taken as one dependent for its symptoms mostly upon an unduly enlarged stomach, the lessening of the cavity of which might afford the relief required. Accordingly gastrorrhaphy was performed. A considerable fold of the anterior wall of the stomach was tucked in and secured by stitches. The untoward result which immediately followed of excessive hæmorrhage into the stomach from the gastric wound must be looked upon as a very unusual and unfortunate but perfectly preventable accident in the performance of the operation. Rather let it be taken as showing how much can be done upon the stomach without any ultimate ill result, for this patient practically underwent two consecutive operations upon the same region.

It would unduly lengthen my remarks did I attempt to dilate upon the particular operation performed in this case. I have introduced it simply as a basis for the larger and wider discussion of gastric exploration. The diagnosis and treatment of unobstructive dilatation of the stomach by operation is merely one aspect of the question and that neither the most important nor, it might be added, the most commendable, because although several successful cases have been reported sufficient time does not yet appear to have elapsed to ensure that the relief at first obtained has proved lasting. With regard to the case shown this evening I can only say that the man has been greatly relieved from his original trouble, he has lost his old continuous pain, he enjoys his food when taken with proper precautions, and he has gained greatly in weight and strength. Whether this general improvement will be lasting it is impossible to say, but I think that it may be fairly concluded that but for the exploratory gastrotomy there is little reason to believe that the apparently true cause of his trouble could have been determined or the proper treatment employed.

Glasgow.

## EXPERIMENTS WITH PANE'S ANTI-PNEUMOCOCCIC SERUM.

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AN anti-pneumococcic serum was first prepared on a large scale by one of us in February, 1897.[1] This serum was obtained by injecting a pony with increasing doses of cultivations of the pneumococcus. The potency of the serum was tested by mixing varying quantities with a ten-fold fatal dose of a living cultivation of the pneumococcus and injecting the mixture into the peritoneal cavity of a rabbit. It was found that 0·03 cubic centimetre of the serum was the smallest quantity which, when tested in this way, protected the animal from death. Animals which had already been infected could be cured by injecting larger quantities of the serum, provided the treatment was adopted not later than in the first quarter of the disease. The serum was thus shown to possess a distinct therapeutic action.

Two cases of pneumonia which were successfully treated with the serum were recorded in the above-mentioned paper and others have been reported in the journals. A full account of the action of the serum and of the method of standardising it appeared in a later paper by us conjointly.[2] The pony after a time, in spite of further injections, ceased to yield a potent serum, so that we were unable to make further trials of its efficacy in the treatment of pneumonia.

On March 14th, 1897, Dr. Pane brought forward a communication upon Anti-pneumococcic Serum before the Medico-Chirurgical Academy of Naples, which was also published in the *Centralblatt für Bakteriologie* of May 27th, 1897. In this communication he gave an account of sera which he had obtained by immunising a cow and a donkey and which he had used in the treatment of pneumonia. Since then he has continued his researches and is now supplying the serum in large quantities. The present serum is obtained from donkeys and is of two qualities, No. 1 and No. 2. Of these No. 1 is stated to be of such a strength that one cubic centimetre neutralises in the rabbit 1000 fatal doses of the pneumococcus, while No. 2 neutralises 3000 fatal doses.

Through the kindness of Dr. T. J. Maclagan we obtained a sample of No. 2 serum which we have tested in order to ascertain whether it would exert the same protective influence upon our cultivations of the pneumococcus as upon those used by Dr. Pane. The results of our experiments are here recorded.

The method of mixing the serum with the cultivation and injecting the mixture into the peritoneal cavity of a rabbit

[1] Washbourn, Brit. Med. Jour., Feb. 27th, 1897.

[2] Further Researches upon the Pneumococcus, Journal of Pathology, January, 1898.

was found to be unreliable on account of the addition of an antiseptic to the serum for preservative purposes. The antiseptic used is 0·25 per cent. of trikresol which when mixed with a living cultivation of the pneumococcus is sufficient to destroy its virulence, as is shown in Table I. We therefore employed the method of injecting the serum into the circulation and immediately afterwards inoculating the cultivation into the peritoneal cavity, thereby excluding the direct action of the antiseptic upon the cultivation.

TABLE I.

| Rabbit No. | Dose of pneumococcus. | Dose of serum. | Method of Inoculation. | Result. |
|---|---|---|---|---|
| 1 | 0·00001 loop* | — | Intra-peritoneally. | Died in 36 hours from pneumococcic septicæmia. |
| 2 | 0·0001 ,, | 1 c.c. serum. | do. | Living. |
| 3 | 0·0001 ,, | 1 c.c. trikresol (0·25 % solution). | do. | Living. |

* Of a blood agar cultivation.

In Table II. are recorded preliminary experiments to ascertain whether the serum exercised any protective action against our cultivation of the pneumococcus.

TABLE II.

| Rabbit No. | Dose of pneumococcus. | Dose of serum. | Result. |
|---|---|---|---|
| 4 | 0·000001 loop* intra-peritoneally | — | Died in 36 hours from pneumococcic septicæmia. |
| 5 | 0·00001 loop* intra-peritoneally | — | Died in 24 hours from pneumococcic septicæmia. |
| 6 | 0·0001 loop* intra-peritoneally | 2 c.c. intravenously. | Living. |

* Of a blood agar cultivation.

In Table III. are recorded experiments to ascertain what multiple of the minimal fatal dose of cultivation one cubic centimetre of the serum would protect against.

TABLE III.

| Rabbit No. | Dose of pneumococcus. | Dose of serum. | Result. |
|---|---|---|---|
| 7 | 0·000001 loop* intra-peritoneally. | — | Died in seven days. Post mortem there were fibrinous peritonitis and pericarditis. From the blood a few colonies were cultivated, although none could be detected microscopically. |
| 8 | 0·00001 loop* intra-peritoneally. | — | Died in 30 hours. Post mortem blood was crowded with pneumococci. |
| 9 | 0·0001 loop* intra-peritoneally. | — | Died in 30 hours. Post mortem the blood was crowded with pneumococci. |
| 10 | 0·0001 loop* intra-peritoneally. | 1 c.c. intravenously. | Living. |
| 11 | 0·001 loop* intra-peritoneally. | 1 c.c. intravenously. | Living. |
| 12 | 0·01 loop* intra-peritoneally. | 1 c.c. intravenously. | Living. |
| 13 | 0·1 loop* intra-peritoneally. | 1 c.c. intravenously. | Died in 60 hours from pneumococcic septicæmia. |

* Of a blood agar cultivation.

Inasmuch as rabbit No. 7, inoculated with 0·000001 of a loop, did not die until seven days after inoculation we consider 0·00001 of a loop as the minimal fatal dose. Consequently one cubic centimetre of the serum protects against at least 1000 fatal doses of our pneumococcus and more might be claimed for it. According to Dr. Pane it protects against 3000 fatal doses of his pneumococcus, so that his results and ours practically coincide.

These experiments are of special interest in showing that the serum will protect against pneumococci obtained from two different sources. We hope shortly to publish further observations in this direction. From our previous experience of anti-pneumococcic serum and from the cases published by Dr. Pane we feel justified in anticipating that further successes will be obtained in the treatment of pneumonia and other pneumococcal affections in the human subject with this serum.

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# ICE OR HEAT AS A LOCAL APPLICATION?

## REMARKS ON ICE-MASSAGE IN PAINFUL CASES OF RHEUMATOID AND ALLIED FORMS OF ARTHRITIS AND ON THE LOCAL APPLICATION OF COLD IN SOME OTHER AFFECTIONS.

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FEW of our therapeutical inconsistencies are more surprising than our employment of the opposite extremes of temperature for similar conditions. For the relief of painful affections both fomentations and ice have been advocated and in the treatment of acute chest affections the ice-bag has entered into keen competition with the poultice and, it is claimed, with greater efficacy. The practical question may often be answered by the patient, but it would be well if from our side some estimate could be arrived at concerning the mode of action and the relative value of cold and of hot applications. This question is opportune in connexion with the recent methods of treatment by superheated air; and in painful forms of arthritis, such as those observed in the following cases, we have favourable material for study, since in them we obtain in addition to the patient's statement as to pain direct evidence from any changes brought about by treatment in the appearance and mobility of the joints. Ice-massage, or gently rubbing the exposed surface with a smooth block of ice for a few minutes, resembles Arnott's method (1851-64) by the direct application of ice rather than Esmarch's method (1860) by a continuous application of ice-bags. This device suggested itself to me whilst I was still unacquainted with the work of these observers as a possible mode of relief in a case of acutely painful rheumatoid arthritis of the hip in which the ordinary treatment by medicines by warmth and by the hot-air bath had been tried without success and in which finally the application of hot sand-bags seemed to aggravate rather than to relieve the affection.

CASE 1. *Painful rheumatoid arthritis of the left hip.*[1]—The patient, a man, aged 33 years,[2] was pale and sallow but was fairly well nourished. His father was rheumatic and his mother suffered from painful Heberden's nodules and "rheumatic gout." The patient was previously healthy, although he had indulged in beer rather freely. He had been operated upon for glands in the neck in July, 1897. There was no history of rheumatic fever, but two or three weeks previously to the onset of the hip pain there had been some painful swelling of the wrists. He had not suffered from syphilis and there had been no gonorrhœa until September, 1898, when a small preputial sore and very slight discharge were observed for a day or two. The present symptoms had begun in December, 1897, with gradually increasing pain and impairment of movement in the left hip and had been much worse since August, 1898. Work had to be given up entirely some weeks before he was seen at the hospital and he was admitted with a diagnosis of sciatica on Nov. 19th, 1898, and since that time had remained in bed, not improving but deteriorating under treatment both as regards pain, fixation, and wasting of the limb. Prior to his

[1] This case was exhibited before the Chelsea Clinical Society on Feb. 21st, 1899.

[2] St. George's Hospital Medical Register, 1898, No. 1663.

admission the worst pain had shifted after the use of hot baths from the front to the back of the hip and thigh. The diagnosis of sciatica was duly considered and laid aside as was also that of gonorrhœal arthritis. There had been a slight urethral discharge since September but not any previously and none could be detected on local examination, only now and then a slight moisture. Nevertheless, as the left testicle though not swollen became painful on Dec. 6th, systematic treatment by oil of sandal wood and by intra-urethral injections was adopted and was continued without any improvement for some days. Active treatment was adopted in the shape of purgatives, daily hot-air bath, iodide of potassium, salicylate of sodium, sulphur, and guaiacum in full doses, together with quinine, and morphia was given at night. Hot-water cushions were placed under the affected hip. The patient was not relieved; the pain and fixation got worse. He had been able to walk with difficulty into the hospital; he was now unable to bear the slightest movement in bed without crying out. The temperature had remained normal until tonsillitis set in on Dec. 10th, and it then oscillated for three weeks between 99° and 101° F. until the ice treatment was applied. The patient lay helpless; the thigh was strongly adducted, the knee (which was also the seat of much pain and fixation without swelling) was slightly flexed, and the foot was inverted. Any attempt at altering the position gave intense pain. The parts about the hip, and particularly the neighbourhood of the tuberosity of the ischium, were intensely tender, but Mr. Warrington Haward found under ether that there was no ankylosis and only moderate thickening of the joint. Inhalations of carbonic acid only gave temporary relief to the pain. The hot-air baths had been given up as ineffectual. Dry heat was now applied in the shape of hot sand-bags, but the application gave only very temporary comfort which was followed by worse pain. This circumstance suggested to me the use of ice. The treatment consisted in gently rubbing the hip and gluteal region and the painful knee with a small block of ice held firmly in the hand with flannel. The relief was immediate. The patient gratefully acknowledged the cessation of pain, his features relaxed, and during the operation he began to smile. The rubbing produced considerable local coldness as felt by the hand and a feeling to the patient of cold and numbness with freedom from pain. There was decided improvement in the general condition during that day and night. When seen again four days later the improvement was still perceptible and a fresh application was made with the same result. On Dec. 15th, there being no doubt as to its efficacy, the treatment was ordered to be applied twice daily. After a few days the patient volunteered to carry it out himself and this he continued to do twice a day, and later once a day, with decided advantage until the pain had entirely left him and stiffness only remained.

It is noteworthy that not only was the pain removed but the stiffness was also markedly relieved by the first and by all subsequent applications. After its prolonged fixation the limb is still lame and not yet able to support the entire weight of the body, and the patient is now undergoing the ordinary treatment by massage and by electricity.

The sensations produced by the application of ice were described by this patient as a feeling of local numbness and cold lasting three-quarters of an hour (and for gradually shorter periods as he improved), followed by an internal glow resembling the pleasant warmth felt from sitting in front of a bright fire. This glow he describes as reviving the feeling within the joint and destroying the pain, and as entirely differing in character from the hot pain with dragging feeling which constituted his special suffering. Two days before the ice was first applied redness, stiffness, and swelling of the knuckles of both hands were complained of. These also disappeared and did not return.

CASE 2. *First acute attack of rheumatoid arthritis.*—A woman, aged 29 years,[3] recently married, was admitted into St. George's Hospital on Nov. 13th, 1898, suffering from acute rheumatism with delirium and moderate pyrexia. She was fairly strong and of healthy antecedents, with a family record free from constitutional disease. She had resided in Gloucestershire till she was 22 years of age, subsequently at Christchurch (a low-lying district in Hampshire) and lastly at Fulham. The catamenia had been regular; she had never had any discharge, and none was found on examination. She had been in bed for a fortnight with pain and swelling in the right instep and in the left knee and some pain and stiffness in the left shoulder. There had been slight diarrhœa before the onset. On admission she was pale, tremulous, heavy-looking, and wandering in her talk. Her tongue was slightly furred, her pulse was 104 and healthy, and her respirations were 20. The apex beat was forcible but normal in position; there was a slight systolic murmur at the apex. The urine was smoky, of specific gravity 1025, and precipitating a fair quantity of albumin; this disappeared after a few days. She was ordered an alkaline salicylate mixture, but this was soon exchanged for a simple alkaline mixture under the impression that the delirium might have been induced by salicylate treatment taken before admission. Nevertheless the delirium continued, and this being clearly not due to salicylism the salicylate was ordered again but in vain. The temperature continued to oscillate between 99° and 100·5° F., and though the delirium ceased after four days the articular pain and swelling did not yield, although the urine was alkaline from Dec. 22nd. The patient having become weaker and more anæmic port wine was ordered with satisfactory results, but the knee and the instep remained swollen, tender, and fixed and the application of cotton-wool and warmth did not confer any relief. At this stage ice-massage was applied by myself and the relief of the pain was immediate. The patient was provided with an ice-bag for the knee and one for the instep, to be kept on continuously, and this procured a good night free from pain. Subsequently the application was given up and the pyrexia and acute symptoms having subsided treatment by firm pressure and subsequently by massage was adopted. She gradually recovered movement in the foot and more slowly in the knee, which remained weak; but at the beginning of March, 1899, the thickening of the joint was slight only and its action was improving.

CASE 3. *Pemphigus with acute and painful joint affection.*—A healthy but spare married woman, aged 36 years,[4] was admitted into St. George's Hospital on Feb. 8th, 1899, with an abundant crop of bullæ and a much ulcerated surface over the sacrum, where a belladonna plaster had been applied. She was in a feeble, depressed state, had had poor health for three months, and had lost flesh. She had had rheumatism frequently but not rheumatic fever. Her last acute attack occurred six weeks previously to admission. The bowels were loose and the catamenial flow was normal but scanty. Her illness began three weeks before admission with the appearance of erythematous rings on both arms. She took to her bed two or three days later, when numerous vesicles developed on both arms, and a week before admission a large blister appeared above both knees and smaller blisters in other situations. Her mouth had also been very sore. No organisms were found in the fresh vesicles and from the older ones only pure cultures of streptococci and diplococci were obtained, but no characteristic micro-organisms. This suggested a septic origin for the eruption, perhaps connected with the sore produced by the plaster. The joints of the fingers, which were red and swollen on admission, became worse and more painful, although the general condition, thanks to narcotics at night and to supporting treatment and arsenic, rapidly improved. The thoracic and abdominal viscera were found to be normal. The general surface was treated with sweet oil and the excoriated portions with a mixture of boracic ointment and carbolised oil. On Feb. 12th, finding the hands intensely tender and rigidly fixed by pain with redness of the knuckles I applied ice-massage to them with immediate relief, the patient being at once able to move the wrist and fingers slightly as well as to bear considerable passive movement. The improvement lasted for many hours and she had a better night. The ice-massage was ordered to be applied when required, but it was not needed for some time. On Feb. 14th pericardial friction developed with præcordial pain, this gradually passed off without any effusion taking place. On Feb. 16th the right ankle and knee were stiff and painful and very tender, with patchy redness of the ankle. The pain and stiffness were relieved by the same treatment. Meanwhile considerable excoriation had taken place at the back of the right thigh, where blebs had formed and ruptured. On Feb. 22nd there was again tenderness of the ankle with slight swelling which warm moist fomentations applied continuously for 24 hours had failed to relieve. The application of ice relieved the pain immediately as

[3] St. George's Hospital Medical Register, 1898, No. 1618.

[4] St. George's Hospital Medical Register, 1899, No. 238.

before and the relief was permanent. The patient's general condition continued to improve and there was no return of the articular symptoms.

*Remarks.*—These cases all agree in two respects; the relief afforded to the pain was immediate, and it lasted each time for a considerable period. This circumstance is a recommendation for the method of ice-massage as distinct from the continuous application of the ice-bag. The experience which may be gathered from the literature on the subject shows that other cases would be likely to benefit and that great relief might be afforded to the severe articular pain of acute rheumatism—although the rapid subsidence of the pain and swelling now obtained under salicylates renders local treatment almost superfluous—and to various forms of neuralgia.

The value of cold as a means of subduing pain and checking inflammation has long been known, but its popularity as a therapeutic agent seems to have fluctuated. Among its most strenuous advocates within modern times have been James Arnott and Professor Esmarch. A summary of Arnott's views will be found in his "Contributions to Practical Medicine and Surgery" (London, 1864).[5] Professor Esmarch's work on "The Use of Cold in Surgery"[6] should be consulted by those interested in the subject. The greater part of his treatise is devoted to the surgical aspects of the treatment by cold, in which he expresses strong belief. He gives illustrations of various shapes of the ice-bag for the limbs, &c., but he had also found good results from its application to acute rheumatic joints and to the pericardium and he gives the notes of three cases of acute rheumatism treated in that way. Arnott was not content with ice but he produced congelation of the surface by a freezing mixture of two parts of ice and one of salt and he found this application, the duration of which was rarely more and sometimes less than five minutes, to be an unfailing means of arresting the pain of sciatica, of neuralgia, and of lumbago. He does not appear to have treated cases of rheumatoid arthritis but he had tried it in chronic rheumatism with rather less striking results: "An anæsthetic temperature will not always be so speedily curative as in the instances of lumbago which have been related." In lumbago he seems to have obtained immediate and permanent improvement analogous to that which he had noticed in the neuralgic cases. The complications which must have occasionally resulted from the local congelation sufficiently explain the neglect which has overtaken the method. Ice-massage is a much milder proceeding, free from danger, and it would seem equally efficacious. It is interesting to note that Arnott's method has recently been revived for the cure of some laryngeal affections. Abrams reports in the *Therapeutic Gazette*[7] the immediate cure of functional aphonia by freezing the skin with the methyl chloride spray over the spot where the superior laryngeal nerve sends its internal branch into the larynx. In some cases he has had to repeat the process. In other neuroses of the larynx, such as laryngismus stridulus, spastic aphonia, and the laryngeal crises of tabes, he has found it of value. He also refers to its efficacy in neuralgia and in peripheral neuritis and to the linear applications of extreme cold practised in France under the name of *stypage* for the relief of neuralgia.

Since writing the preceding lines I have had experience of the value of ice-massage as a means of relieving the severe pleuritic pain which commonly accompanies acute pneumonia of the base. The results were encouraging. In the two patients treated the relief of the pain was immediate and the application was welcomed as a comfort. The relief in one of the cases lasted for several hours, but it was not permanent. This suggests that the frequency of applications might be arranged to suit each case.

Although dealing with the local effects of cold this communication would not be complete without a reference to another mode of application successfully employed by Dr. Beverley Oliver Kinnear of New York.[8] Dr. Kinnear has recorded remarkable results from the systematic use of the spinal ice-bag in chronic rheumatism and in lumbago both chronic and acute; and he has found the same method of great benefit in various other affections.

Curzon-street, W.

[5] James Arnott wrote essays on "The Local Application of the Benumbing or Congealing Temperatures in Inflammatory, Painful, and Malignant Diseases" (London, 1852); on "Neuralgic, Rheumatic, and other Painful Affections, with Notices of Improved Modes of Treatment" (London, 1851); on "The Painless Extirpation of Cancerous Growths by Congelation and Caustic, including Report on the Recent Use of Prolonged Congelation in the Cancer Wards of the Middlesex Hospital"; and on "The Internal Application of Very Low Temperature in Asiatic Cholera."

[6] New Sydenham Society's Translation, vol. xi., 1861.

[7] Cf. Medical Press and Circular, Feb. 15th, 1899, p. 171.

[8] Cf. "Chronic Articular Rheumatism and Lumbago treated by Cold over the Spine," Medical News, August 20th, 1898.

## A CASE OF EXTRA-UTERINE GESTATION CLOSELY RESEMBLING UTERINE PREGNANCY; OPERATION FOUR MONTHS AFTER TERM; RECOVERY.

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A MARRIED woman, aged 38 years, consulted me in March, 1898, believing herself to be pregnant. She gave the following history. She had been married for 12 years and had one child only who was then aged 11 years. Since the birth of this child her menstrual periods had always been regular at every four weeks. In November, 1897, the catamenia took place as usual, but since that date she had seen nothing. On vaginal examination a central pyriform swelling could be made out extending a short distance above the pubes and apparently moving with the cervix when manipulated bimanually. In addition the early symptoms of pregnancy were manifest. This examination left little doubt in my mind that she was pregnant and I promised to attend her in her confinement in the following August. All went well until the latter part of July, 1898, when she consulted me for paroxysmal pains in the lower half of the abdomen which at times were very severe. There had been complete amenorrhœa since her last menstrual period in November, 1897, and no history of the escape of decidual membrane or blood could be obtained. On vaginal examination the os uteri, which was lying in the posterior segment, was found to be soft and patulous and to move with the abdominal tumour which now extended well above the umbilicus; in other words, the uterus could not be defined apart from this central abdominal tumour. During the ensuing fortnight (i.e., at about the middle of August) pains suddenly commenced in the back, the paroxysmal abdominal pains being still in evidence though less intense, and in addition there was a blood-stained discharge from the vagina resembling "the show." Believing that her confinement was about to take place she sent for me and for the nurse. On examination the os uteri was dilated so as to admit the tip of the index finger, and on pressing down the abdominal swelling with the disengaged hand a hard mass which I took to be the fœtal head could be felt by the examining finger. Fœtal heart-sounds were audible, the breasts were enlarged and typical, and milk could be squeezed from the nipples. This spurious labour lasted a few days and then subsided. My partner, Mr. Berridge, saw the patient with me and we decided to await events. As time progressed no signs of labour returned, the mammæ became smaller and ceased to secrete milk, the abdominal swelling also subsided to some extent, and the os uteri contracted.

As the patient appeared to be "losing ground" I asked Dr. J. A. Mansell Moullin to see her in November with us, being in doubt as to whether it was a case of (*a*) extra-uterine gestation; (*b*) pregnancy in a bicorned uterus; or (*c*) so-called "missed labour"—that is, adopting Dr. Robert Barnes's definition, "the hypothetical retention of a mature fœtus in the uterus beyond the natural term of gestation, signs of labour at the proper time having been manifested." Dr. Galabin in his text-book on Midwifery says that this occurrence is at any rate of extreme rarity and doubts have existed as to whether all cases so described may not have been misinterpreted instances of ectopic fœtation—that is, either extra-uterine, tubo-uterine, or in an abnormal uterus. Yet there is little doubt, from the interesting case reported by Dr. Mary Scharlieb,[1] that such a condition is possible, Dr. Scharlieb's case being verified by operation and necropsy. We decided to explore the uterus in a short time if meanwhile it had not expelled its contents. Accordingly on

[1] Brit. Med. Jour., Sept. 17th, 1898.

Dec. 10th I passed a French bougie into the uterus. The instrument passed easily for five inches but would not go further. As no response was made to this form of treatment I removed the bougie in 48 hours' time. I next introduced a laminaria tent, but this procedure was equally futile, as the cervix could not be dilated more than enough to admit the finger; moreover, the impression one got from this examination was not that of a pregnant uterus and, further, that the uterus was apparently distinct from the abdominal tumour. The patient was therefore put back to bed, abdominal section being decided upon as soon as she had recovered from the effects of this examination. As the patient was determined upon operation in her own home, a small three-roomed house, I was obliged to fall in with her request and on the following day I commenced to prepare a room suitable for such a surgical undertaking. Dr. Moullin, who kindly assisted me at the operation, examined the patient before the anæsthetic was administered and confirmed our view of the case. The diagnosis being now placed almost beyond doubt I proceeded to carry out the operation.

The patient having been placed under ether by Mr. Berridge the peritoneal cavity was opened by an incision about six inches in length extending between the umbilicus and the pubes and the tumour was exposed. Numerous adhesions were found between the tumour, the intestines, and the omentum, and whilst manipulating these the tumour or the sac containing the fœtus ruptured anteriorly and about two pints of greenish-brown fluid escaped. The hand was now introduced into the sac and after some trouble a leg was delivered and the whole fœtus—a well-developed female partially decomposed and weighing nine pounds—was removed. The placenta, which was attached to the left wall of the sac, was peeled off without difficulty, being very friable and almost bloodless. No attempt was made to remove the sac, the mouth of which was stitched to the abdominal wound, and a plug of antiseptic gauze was passed into its cavity. The convalescence was uneventful.

My chief reason for publishing this case is to show the difficulties which may arise in the diagnosis of these cases. Here, for instance, with the exception of the paroxysmal pains in the eighth month, there was nothing to cause suspicion that the case was other than a uterine pregnancy, both subjectively and objectively. To recapitulate: subjectively there were (1) complete amenorrhœa since November, 1897, with absence of pelvic pain; (2) typical changes in the breasts; (3) morning vomiting; and (4) fœtal movements. Objectively there were (1) a tumour centrally situated and freely moveable; (2) a cervix lying back "apparently shortened" and flattened, soft and patulous, and dilated at the time at which labour should normally have occurred, associated with pains in the back and "a show"; (3) fœtal heart sounds; and (4) a uterus not definable apart from this central abdominal swelling. As pointed out by Mr. Bland Sutton in his interesting article on Extra-uterine Gestation in Allbutt and Playfair's "System of Gynæcology" the subjective symptoms of pregnancy are generally present in these cases of extra-uterine gestation. It is the objective symptoms or physical signs which constitute the most difficult and misleading features in these cases.

Redhill.

## CHRONIC ŒDEMA OF THE CONJUNCTIVA ASSOCIATED WITH DISEASE OF THE MIDDLE EAR.

BY RAYNER D. BATTEN, M.D., B.S. LOND.,
ASSISTANT SURGEON TO THE WESTERN OPHTHALMIC HOSPITAL.

THE causal relationship of certain conditions of the eye to diseases of the middle ear is generally difficult of proof. The association of the two conditions is, I think, frequent, but it is generally difficult to exclude the accidental concurrence of the two. I do not now refer to the inflammatory condition of the conjunctiva and cornea with otorrhœa, in which the cure of the ear trouble relieves the eye trouble, as that is always possibly—and probably—due to the external infection of the eye from the ear-discharge, but to a deeper relationship causing nutritional changes in the eye and orbit which are not due to external conveyance of infection. The following case brings it as near to a proof as possible.

A man, aged 35 years, attended at the Western Ophthalmic Hospital with well-marked serous œdema of the ocular conjunctiva of the left eye. The conjunctiva was pale, loose, and baggy, slightly overlapping the cornea, and containing a clear fluid. This man attended regularly for some months and I tried all forms of external and internal treatment that my ingenuity could suggest. On one occasion I incised the conjunctiva and let out the serous fluid which, however, rapidly collected again when the incision healed. At different times I gave salicylate of soda in rather large doses—a drug which I had previously found to be of great service in some cases of bilateral œdema of the conjunctiva. I also gave iodide of potassium and various other drugs. Treatment, however, appeared to have no effect. On a later investigation of his case I found that the patient had had a chronic discharge from his left ear for many years; he was, however, not in the habit of taking any notice of it, as it only caused him slight inconvenience. On examining his ear it was found to be completely blocked by a very large polypus which had perforated the membrana tympani. This was removed and the discharge greatly diminished but still continued, though not now offensive. The œdema of the conjunctiva persisted, although somewhat diminished. He was then ordered a spirit lotion to be dropped into the ear and promptly the discharge from the ear and the œdema of the conjunctiva disappeared simultaneously without any further treatment to the eye.

There appeared to me and to others who saw this case with me no reasonable doubt that the condition of the eye was produced by the disease of the ear and that it was cured by the treatment of the latter. The connexion between the two conditions is obscure. Dr. Sidney Phillips[1] published three cases of œdema of the upper eyelid during scarlet fever. In each of his three cases only one eye was affected, in each case there was suppuration in the middle ear of the same side, and in each case the œdema subsided with the relief of the ear condition. In one of his cases, however, a small abscess formed in the lid. I have on various occasions noted the occurrence of choroiditis associated with chronic disease of the middle ear; also of myopia, with or without choroiditis, on the same side as a chronic ear disease. But in these conditions the cure of the ear disease does not remove the results of the disease in the eye and therefore definite proof of the association of the one with the other is not possible and there is always the possibility of a common cause. The form of optic neuritis which occurs in suppurative middle-ear disease appears to be somewhat different from that which is caused by cerebral tumour in that it subsides with the removal of the cause and does not affect the vision.

These facts taken together appear to me to be at least suggestive of a causal relationship between disease of the middle ear and diseases of the orbit and eye and must be my excuse for publishing an isolated case.

Harley-street, W.

# Clinical Notes:

## MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

### NOTE ON THE TREATMENT OF INFLUENZA BY LARGE DOSES OF CARBOLIC ACID.

BY ARTHUR WIGLESWORTH, L.R.C.P. LOND., M.R.C.S. ENG.

FOR many years I have been prescribing carbolic acid in cases of influenza in doses of from seven to eight grains every two hours, with rapid relief from all the symptoms; but an accident revealed to me that this dose could be very considerably increased without any danger and with still greater beneficial results to the patient.

I saw a patient about five weeks ago who had been seized with the worst attack of influenza which I had ever seen. There was not only violent cephalalgia with acute myalgic pains, but there were incessant vomiting and high temperature. Her pulse was 130 and she suffered from intense thirst, prostration, and much mental depression. She

[1] Brit. Med. Jour., Jan. 26th, 1895.

also complained of severe abdominal pain and as she was seven months advanced in pregnancy she feared labour had set in. I ordered her a mixture containing two drachms of Calvert's liquid carbolic acid in eight ounces of water, one tablespoonful to be taken every two hours. This is equal to six and one-third grains of pure phenol for a dose. She commenced to take this medicine at mid-day. I learned on the next morning that during the night she had poured out a small wineglassful of the mixture and had drunk that instead of a tablespoonful. Careful measurement of the glass which she had used showed that it held just two ounces. The patient declared that it was filled but I allowed only three-quarters as having been taken and even this would amount to 19 grains in the dose. The patient averred that the only apparent deleterious effect was feeling "a little warm" in the abdomen and that every other symptom had abated. The cephalalgia was reduced to a minimum, the myalgia ended in a little soreness of the limbs, the abdominal pain had ceased, and the vomiting had abated, and she was sitting up in bed laughing at her mistake. I had only to make one more visit when convalescence was established. As I had previously considered seven grains of phenol a maximum dose this experience was a revelation to me. The next case occurred a few days afterwards. I administered 12⅔ grains every two hours with the same gratifying results and I have done so in each case which I have had since. I can now assure my patients most confidently that after the first two doses relief will ensue. I desire, therefore, to recommend to my fellow practitioners this method of treatment, especially in the larger doses, feeling assured that they will find the same results to follow its adoption.

As I find that much misapprehension exists concerning, not only the dose of carbolic acid, but its toxic effects, I have endeavoured to ascertain what dose of carbolic acid has proved fatal but I cannot find any very definite records, as large and varying doses of undiluted crude carbolic acid have been taken. I believe there is a record of a teaspoonful having proved fatal, but as to the age of the patient or the attendant circumstances of the case I know nothing. In the general records of fatal cases I cannot find anything very definite concerning the therapeutical effects beyond those which accompany the administration of acute irritant poisons generally—viz., pain and nervous prostration—though in some few instances coma has, I believe, supervened. As to the effect, however, of the large doses of pure phenol to which I have referred there is neither sickness nor purging and not even nausea. In the special case referred to it will be seen that as much as 108 grains were taken in 18 hours, and I have under observation at present a case, not of influenza, however, in which I am administering 13½ grains of pure phenol every two hours during the waking hours of the patient and certainly no deleterious effects on the alimentary canal, the kidneys, the heart, or the nervous centres have ensued and this administration has now been going on for three weeks, so that there need be no apprehension of any unpleasant effects being produced by these large doses. I think if these facts were generally known carbolic acid would be much more extensively used, especially in cases of microbic origin, than hitherto has been the case. Moreover, when mixed with syrup of orange peel and water—say four drachms of syrup of orange peel and one and a half ounces of water for a 12-grain dose—it is by no means unpalatable and I have not found patients, whether old or young, object to it.

Liverpool.

## NOTES OF A CASE OF ANEURYSM OF THE ASCENDING ARCH OF THE AORTA RUPTURING INTO THE PERICARDIUM; NECROPSY.

By W. GRAY, M.D. EDIN.

ABOUT 5.30 P.M. on March 14th, 1899, I received an urgent message to "attend a railway shunter who had been injured" and immediately responded to the summons. The facts of the case are briefly as follows. The shunter, who was about 33 years of age and had since entering the service of the railway company nine years ago practically never been off duty through illness, was engaged with his mate in the performance of his usual duties. His mate left him standing on a wooden box (covering the cranks and apparatus for moving railway points) about six or eight inches above the level of the railway sleepers and it was afterwards ascertained that he had moved the lever to shift the points. His mate on returning found him lying on his left side in a trench (which had been dug for a new siding) close by the side of the rails. The height from the bottom of the trench to the top of the wooden box was two and a half feet. On examination I found a small abrasion on the left cheek and a few scratches in the front of the left ear. He was unconscious, breathing very lightly, and no heart's action could be recognised. In spite of attempts at resuscitation he died about 5 50 P.M. on the same day.

In my evidence at the inquest I stated that with the exception of the abrasion mentioned I could not say what injuries the deceased had received or what was the cause of death, adding that from the examination which had been made I saw no evidence, apart from the history of the fall, of anything which would cause death. An adjournment took place for a post-mortem examination which was made in conjunction with Dr. F. H. Morison who acted on behalf of the relatives.

At the necropsy the liver, spleen, and kidneys were found to be enlarged. There were old pleuritic adhesions over the whole surface of the right lung, also a few old pleuritic adhesions on the left side. The pericardial sac was thickened and contained large currant-jelly-like clots and some blood-stained fluid. The heart valves and muscular substance appeared to be normal. The ascending arch of the aorta was found to be the seat of a large sacculated aneurysm which had ruptured into the pericardial sac. The brain and other organs were normal. The jury returned a verdict that deceased died while in the execution of his usual duties from internal hæmorrhage as stated in the medical evidence.

*Remarks.*—The case is an excellent example of the great value (one might almost say urgent necessity) of a post-mortem examination where there is reasonable doubt as to the cause of death. As the Workmen's Compensation Act applied to this case, and as the relatives threatened an action against the railway company, by practically no other course could justice have been rendered to employers and relatives.

West Hartlepool.

## NOTE ON A CASE OF ASPHYXIA FROM PRESSURE OF AN ABSCESS UNDER THE CHIN WHILST UNDER THE INFLUENCE OF NITROUS OXIDE.

By HOWARD H. C. DENT, M.B. DURH., M.R.C.S. ENG., L.R.C.P. LOND.,

HOUSE SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

A BOY, aged 12 years, was brought to the Queen's Hospital, Birmingham, on March 18th, 1899, with a large swelling containing pus between the chin and the hyoid bone. The lad was very ill and was evidently suffering from septic poisoning. The lower jaw was almost immoveable, the mouth being slightly open. He had been ill for 10 days but had not complained of difficulty in breathing. Gas was administered in the recumbent position and the patient appeared to go under its influence more quickly than is usual and his breathing was not nearly so full as is generally the case. The face-piece was removed and an incision was made in the middle line over the swelling. The incision had only gone through the skin when the respiration became embarrassed and air ceased to enter the chest, although the movements of the thorax continued. At the same time there was a spasm of the jaw and slight convulsive movements of the limbs occurred. The tongue was with difficulty pulled forwards owing partly to the spasm and partly to the enormous amount of inflammatory thickening about its root. Artificial respiration was at once commenced, but no air entered the chest although the tongue was drawn well out of the mouth. Tracheotomy was performed and respiration was kept up for one hour, air entering freely through the wound, and ether was injected under the skin and directly into the heart but there were no signs of recovery. On opening the trachea a small quantity of pus was forced through the wound, and it was thought that the abscess had burst into the windpipe and caused suffocative spasm.

At the necropsy an abscess of the size of a small orange was found excavating the body of the tongue and sitting on

the top of the larynx. There was some pus in the trachea but no communication with the abscess could be found. The other organs were healthy. The usual signs of asphyxia were present. Death appears to have been due to pressure of the abscess on the glottis, acting either directly or by causing spasm of the sphincter laryngis. This pressure would be increased by (1) the recumbent position; (2) the extension of the head necessary to open the abscess; and (3) the pressure of the knife.

Birmingham.

# A Mirror
## OF
# HOSPITAL PRACTICE,
## BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

## PADDINGTON GREEN CHILDREN'S HOSPITAL.

### A CASE OF TUBERCULOUS PERICARDITIS; NECROPSY.

(Under the care of Dr. G. A. SUTHERLAND.)

TUBERCULOUS disease of the pericardium is a by no means infrequent accompaniment of extensive tuberculosis elsewhere and Baginsky has recently shown[1] that in 9 per cent. (six cases out of 66) of a series of cases of pericarditis in children the disease was tuberculous. It is, however, in only a very small proportion of these cases of tuberculous pericarditis that the pericarditis gives rise to any important symptoms and in most instances the tuberculous disease is only discovered at the necropsy. The great distension of the pericardial cavity which—sometimes at least—occurs in these cases is well shown in the clinical history recorded below. A very similar instance in which the amount of fluid present was even greater has been described by Mussex of Philadelphia,[2] for the pericardial cavity contained 64 ounces of blood-stained serum.

A girl, eight years of age, was admitted into the Paddington Green Children's Hospital on Dec. 4th, 1896. No very precise account of her illness could be obtained as she had been living with friends in the country for five months and had returned home on the previous day. For six weeks she had been noticed to be "getting ill" and had complained of pains in her chest and tiredness. There had been shortness of breath and coughing and on the previous day she had fainted. There was a definite history of pulmonary phthisis in the family, her mother's father having died from that affection. The patient had always been a delicate child, subject to sore-throat, and had suffered from scarlet fever, measles, and whooping-cough.

The patient was a tall, well-built, fair child with a somewhat anæmic complexion and looked decidedly ill. The temperature was 100° F. and rose the same night to 104°. There was no eruption or flushing of the skin, but the superficial veins of the thorax and abdomen were distended. The breathing was rapid (46 to the minute) and somewhat laboured. The left side of the chest moved less than the right and after it in time. Percussion of the left side of the chest showed impaired resonance everywhere, there being dulness at the left apex anteriorly and at the back, while from the second rib anteriorly to the costal margin and from one inch to the right of the sternum to the posterior axillary line the note was absolutely dull. Over this latter area the breath sounds were scarcely audible and vocal fremitus and vocal resonance were absent. The breathing at the left apex was bronchial and over the back posteriorly it was very harsh vesicular, with some crepitations. The right lung was apparently normal. In the præcordial region there was distinct bulging from the third to the fifth intercostal spaces and also slight but definite œdema. The apex beat could not be localised and epigastric pulsation was present. Firm pressure caused pain but no thrill or friction could be determined. As already stated, there was a large area of absolute dulness extending from the second rib to the costal margin and from the posterior axillary line to an inch beyond the right border of the sternum. The cardiac sounds were very weak and distant both at the base and the apex and were apparently unaccompanied by any murmur. The cardiac action was regular and rapid, being from 150 to 170 beats per minute. The pulse was running, weak, irregular, and of small volume. Examination of the abdomen showed nothing abnormal. The urine contained no albumin and there was no œdema of the extremities. On the same evening an exploring needle was introduced into the left axilla and some turbid fluid was drawn off. As a result of this fluid continued to ooze from the site of puncture until a dressing of considerable size was soaked with it and a bulging swelling formed in the axilla from the accumulation of fluid in the subcutaneous tissues. On again auscultating the heart distinct pericardial friction was heard over and to the right of the lower end of the sternum. The conclusion arrived at was that the patient was suffering from non-purulent pericardial effusion which had been at least temporarily relieved by the escape of the fluid. During the following week there was improvement. The temperature showed a diurnal range of from normal or 99° in the morning to 101° or 102° in the evening. The œdema of the præcordial region and the distension of the thoracic veins rapidly passed off, while more gradually the cardiac sounds became louder and more superficial and the area of pericardial friction became larger. The large area of dulness on the left side of the chest still persisting an exploring needle was introduced but with a negative result.

During the following month there was slow improvement in the patient's condition. Coughing was at times troublesome and sleep was rather broken, but she complained of no special pain or discomfort. The diurnal variations in the temperature continued, but the maximum at night was gradually becoming lower. The liver and spleen were enlarging. The condition of the left side of the chest showed little change. There was loud bronchial breathing at the left apex in front which became very faint and distant below the third rib. On the same side over the back the breath sounds were bronchial at the apex and along the spine, but were inaudible elsewhere, being replaced by coarse creaking sounds and râles. The enlarged area of præcordial dulness persisted with superficial friction and distant heart sounds. There were no evidences of valvular disease, no clubbing of the fingers, and no œdema of the extremities. A month later (Feb. 4th) it was noted that the face looked swollen and was of a waxy pallor with a pink flush on the malar regions. The temporal and the superficial abdominal veins were swollen and there was slight œdema of the feet and legs. The liver extended to an inch below the level of the umbilicus and the spleen to two inches below the costal margin. The cough was frequent and harsh. The physical signs in the left chest were practically unaltered and it was impossible to map out the cardiac area by auscultation or percussion. There was very slight movement of the left side of the chest during respiration, but distinct bulging was present in the præcordial region. The patient was transferred to the convalescent home on Feb. 27th. On March 9th it was noted that the patient had been very well since admission with the exception of persistent coughing at night. There was found in the upper part of the left axilla an elongated swelling which consisted of a number of small, hard nodules of about the size of split peas. They were not painful or tender, the skin was freely moveable over them, and they appeared to be attached to the deeper tissues. The temperature had been normal for some time but now began to show a slight elevation in the evening. On March 24th the patient complained of headache and there followed in rapid succession the ordinary signs of tuberculous meningitis. She was re-admitted to the hospital and died from that affection on April 6th. The total duration of the pericardial trouble cannot be definitely stated, but it was four and a half months from the time when the friends noticed any sign of disease to the day of her death.

*Necropsy.*—A post-mortem examination was made by Dr. Leonard Guthrie on the following day. On opening the thorax the pericardium was found to be firmly adherent to the inner surface of the sternum and also to the costal wall in the left axillary region. The pericardial sac occupied almost the whole of the left pleural cavity and extended two inches beyond the mid-line. On opening the pericardium a

[1] Berliner Klinische Wochenschrift, Nov. 28th, 1898, p. 1053.
[2] Transactions of the College of Medicine, Philadelphia, November, 1888.

gush of turbid fluid took place. The pericardium was much thickened and the inner surface was covered with dense fleshy or fatty looking deposit. Masses of this could be detached of the consistence of cream cheese. The heart, which lay entirely free, was covered with nodules of various sizes, up to that of a pea, of a tuberculous nature. On examining the axillary adhesions it was found that immediately external to them were the hard bodies felt during life in the axilla and that these were similar in composition to the material found in the pericardium. It seemed probable that they had passed in a semi-solid state from the pericardium along the track of the puncture made when the chest was explored and had become solidified. The heart was much enlarged and its substance was pale and soft. The valves presented no evidence of inflammation. The left lung was not at first visible, but was found to occupy a small space at the apex of the pleural cavity and along the spine. It was so adherent and solidified that it could only be removed piecemeal. There was no tubercle in either lung, the right one being rather small but otherwise normal. The bronchial glands were enlarged but not caseous. As regards the abdominal organs the special conditions noted were that the mesenteric glands were enlarged and a few of them were caseous, while the spleen contained some small tuberculous nodules. The surface of the brain was everywhere intensely congested and along the side of the longitudinal fissure was covered with small tubercles which did not extend further than one inch from the midline. There were no tubercles visible in the Sylvian fissures, but the edges of these and the other sulci felt gritty. The membranes at the base were opaque and thickened.

*Remarks by* Dr. SUTHERLAND.—Tuberculosis of the pericardium may present itself under three different conditions: (1) as a part of acute general tuberculosis miliary tubercles may be present in the pericardium (these do not as a rule produce any symptoms during life); (2) as the result of a local extension from a tuberculous focus in the adjoining structures, the lungs, mediastinal glands, &c.; and (3) as a form of pericarditis which is probably secondary to a tuberculous deposit in some part of the body, but where the pericarditis is the prominent feature of the illness and the tuberculous disease elsewhere remains latent, often unsuspected. Of this somewhat rare condition the above case would appear to be an example. The diagnosis of the exact conditions during life presented some difficulty. Pericardial effusion with great dilatation of the pericardium was determined by the exploring needle and subsequent signs, but the state of the left lung could not be clearly made out. Pulmonary tuberculosis, dilatation of the bronchial tubes, and new growth were passed in review and no one of them could be absolutely excluded. As it turned out, the anomalous signs heard over the region of the left lung were associated with the gradual recession of that organ towards the apex and the spine, and the various accompaniments heard on auscultation (coarse and fine râles, creaking sounds) were probably produced within the pericardium. By some a very large amount of exudation is regarded as a characteristic sign of tuberculous pericarditis and in the above case it certainly was a striking feature, the pericardium having completely displaced the left lung and encroached seriously on the right. The signs of cardiac embarrassment were progressive, but it is worthy of note that the heart lying free in a sort of mud bath of organised lymph and caseous matter was able to struggle on successfully for some months. The case terminated fatally from tuberculous meningitis, as has happened not infrequently in other recorded cases, and it would appear most probable that this affection, like the tuberculous pericarditis, had originated in the caseous mesenteric glands.

BRISTOL ROYAL INFIRMARY.—The annual meeting of supporters of this institution was held on March 28th under the presidency of Sir Charles Cave. The report stated that during 1898 there were 2969 in-patients admitted, against 3183 in 1897, this decrease being due to the recent structural alterations in the infirmary which temporarily interfered with the full occupation of some of the wards. There were also 40,504 out-patients treated, against 37,066 in the preceding year. The financial statement showed that the total ordinary income for the year amounted to £9913, the total ordinary expenditure being £14,218. The institution has now an accumulated deficit of £8500. The President who has now held the office for more than 20 years was re-elected.

# Medical Societies.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

*Pulmonary Tuberculosis.*

WE conclude our report of the meeting of this society held on March 28th, the first part of which was published in THE LANCET of April 1st; Mr. BRYANT, the President, was in the chair.

Dr. THEODORE WILLIAMS and Dr. HERBERT HORROCKS communicated a paper on the Treatment of Pulmonary Tuberculosis by Anti-tuberculous Serum. After reviewing the various investigations into the serotherapy of tuberculosis made in France, Germany, Hungary, Italy, and the United States, by Richet, Héricourt, Bouchard, Darmberg, Bernheim, Babes, Maragliano, Paquin, Trudeau, and others, Dr. Williams and Dr. Horrocks gave an account of their own investigations carried out on nine patients at the Brompton Hospital. The antituberculous serum was procured at the Jenner Institute of Preventive Medicine by inoculating a horse (an animal generally considered to be immune to tubercle) with increasing doses of tuberculin, until no reaction followed, the maximum dose being 500 cubic centimetres, which was given on two occasions. 21 days after the last inoculation one litre of blood was drawn from the left jugular veins, the clot was removed, and the serum was mixed with a weak solution of carbolic acid (for preservative purposes) and transferred to sterilised bottles. Afterwards this was injected hypodermically with all antiseptic precautions into the selected patients. The cases first chosen were those (1) of acute lung tuberculosis or (2) of chronic lung tuberculosis where acute disease had supervened. Five patients were submitted to the treatment, the doses commencing with one cubic centimetre and gradually being increased to 10 cubic centimetres, the object being to bring the system under the influence of the serum as soon as feasible. The treatment was carried on for periods of from 15 days to three months, and the number of injections administered was from 15 to 25. The immediate result was rise of temperature and of pulse, slight urticarial or erythematous rashes, and enlargement of the axillary glands. The effect on the lungs was increase in the amount of expectoration, diminution in the lung tissue contained therein (except in one case where it increased), diminution of septic organisms in two cases, and disappearance in two cases. In one case these were altogether absent. With the exception of one case there was no reduction in the number of tubercle bacilli. The general condition of the patients deteriorated and one died from a fresh eruption of tubercle and its attendant pleurisy some time after the termination of the injections. Two of the patients gained a few pounds in weight but the physical signs at the close of the treatment showed that tuberculisation and excavation had gone on unchecked by the serum injections. The urticarial rashes were apparently due to the amount of carbolic acid added to preserve the serum, as on the quantity being reduced these rashes no longer appeared. Dr. Williams and Dr. Horrocks then determined to try (1) serum taken at longer intervals after the horse's inoculation with tuberculin; (2) to employ smaller doses, beginning with one cubic centimetre and never exceeding five cubic centimetres; and (3) to use it in cases of incipient and limited tuberculosis as well as in cases of limited excavation. The serum was now taken 72 days after inoculation and was tried in two cases of limited unilateral tuberculosis and also in two of excavation limited to one lung, and the results proved a marked contrast to those of the previous experiments. The treatment was carried out for longer periods, owing to its being better borne than in the first group, and from 32 to 50 injections were given in doses varying from one cubic centimetre to five cubic centimetres. The injections in no case gave rise to any local swelling or irritation or rash, either of urticarial or erythematous type, but in all the patients the axillary glands became enlarged during the treatment. The temperature sometimes rose after the injections in one case; in the other three cases the records were invariably normal or subnormal. The pulse and respiration rate were not materially affected. All four patients gained weight, the two excavation

cases most, one 12½ lb. and one a stone; the tuberculisation cases 5½ lb. and 6 lb. respectively. All increased in strength and vigour and were able to return to their work, except one patient, in whose case a lighter occupation was substituted for a comparatively trying one. Cough and expectoration diminished in all and in one case they altogether ceased. Physical signs showed limitation of the area of disease in the lungs in the consolidation cases and in the two excavation cases quiescence of the cavity in one and complete contraction in the other. With regard to the sputum contents in three cases the tubercle bacilli greatly diminished in number and at times disappeared altogether, but at the close of the treatment there were still some to be detected. In one case they did not diminish at all, though the patient improved generally. The other organisms—diplococci, staphylococci, and streptococci—disappeared in the two cavity cases, and in the consolidation cases they were noted throughout, though in diminished numbers. In one excavation case two injections of streptococcic serum were made with no special effect on the pyrexia or general condition, but it was found that the septic organisms disappeared from the sputum. Dr. Williams and Dr. Horrocks concluded that in order to produce an anti-tuberculous serum capable of controlling the evolution of tuberculosis in the human body a considerable interval must elapse between the inoculation and the date of the withdrawal of the serum, for when taken a few weeks after inoculation its effects closely resembled those of Koch's first tuberculin. The present trials encouraged a further trial of the milder form of anti-tuberculous serum in early cases of lung tuberculosis or where the lesion is limited, but where the disease is overwhelming, as in acute pulmonary tuberculosis or the lung surface is largely invaded by fresh tubercle no advantage is likely to be derived from its use.

Dr. R. L. BOWLES said that the observation that weaker forms of serum gave the best results was in accord with his own experience when he used Koch's first tuberculin. The reaction was so great in cases in which he had seen the stronger dose used abroad that in his own practice he had employed the weaker form and he thought it acted better. In some cases permanent arrest followed; in others the disease continued unchecked.

Dr. WILLIAMS, in reply, said that he had employed Koch's first tuberculin and had seen great improvement in some cases but his general opinion of it was unfavourable. There was not only lighting up of local mischief, but in nearly every case breaking down of lung as shown by appearance of lung tissue in the sputum.

## PATHOLOGICAL SOCIETY OF LONDON.

*Congenital Cyst of the Tongue.—Rheumatic Nodules.—Cystic Disease of the Breast.—Enlargement of the Pituitary Body.—Vacuolated Sarcoma of the Antrum.—Biliary Calculus in Children.*

A MEETING of this society was held on April 4th, the President, Dr. PAYNE, being in the chair.

Mr. RAYMOND JOHNSON showed a specimen of Congenital Cyst of the Base of the Tongue obtained from a male infant, aged four months. Dyspnœa had been present since birth and necessitated tracheotomy when the child was four months old, but he died about a week after the operation. The cyst occupied the extreme posterior part of the tongue, lying exactly in the middle line and projecting on the surface as a smooth hemispherical swelling about 1·5 centimetre in diameter. The postero-inferior surface of the cyst lay in contact with the epiglottis, the latter being so much pushed backwards as nearly to occlude the upper aperture of the larynx. The anterior border of the cyst lay immediately behind the circumvallate papillæ and no indication of the presence of a foramen cæcum could be detected. In sagittal section the cyst presented an almost semicircular outline, the antero-inferior or deep aspect being flattened. Its inner surface was smooth and presented in its deepest part a small depression, the orifice of a short canal in the substance of the tongue. The contents of the cyst after hardening in spirit consisted apparently of coagulated mucus. Examined microscopically the cyst was found to be lined with a layer, in most parts several cells thick, of flattened epithelium. Outside this was a thin fibrous cyst-wall which in the deep aspect of the cyst was in direct continuity with the muscular substance of the tongue and the large acinous glands embedded in it. The origin of congenital cysts in the posterior part of the tongue was discussed, the view usually held being that such cysts had their origin in the lingual duct or some of its glandular appendages. Dr. Martin Schmidt of Strasburg had carefully examined a considerable number of tongues in which cystic formations were present in the posterior part and had come to the conclusion that such cysts, which were often lined with ciliated epithelium, were derived from glandular appendages of the lingual duct rather than from the duct itself. In Mr. Johnson's specimen, however, seeing that the cyst was exactly mesial in position, that there was no evidence of its having been formed by the confluence of smaller cysts, and that it was lined with flattened epithelium, it was thought probable that the cyst had arisen as a dilatation of the lingual duct itself.—Mr. SHATTOCK said that he thought that the only reason why many of these cysts were put down as cysts in connexion with the lingual duct was because they were in the middle line. Exactly similar cysts were found in positions such as the stomach and œsophagus where there was no question of their starting in the developmental relic. He thought that if it were not for the mesial position of the cyst the present specimen would have been put down as an ordinary mucous cyst.

Dr. F. J. POYNTON and Dr. G. F. STILL communicated a paper on the Histology of the Rheumatic Nodule. They pointed out that it was essential in the study of this subject that recent nodules and not those of old standing should be examined; and, moreover, that a section passing through the periphery of the nodule might give quite a different appearance from one passing through the centre. It was necessary, therefore, to take young nodules and to ensure as far as possible that the section should pass through the centre. The difficulties of this procedure were considerable. A study of sections taken as far as possible in this way showed that in the centre the nodule consisted of fibrinous material, while nearer the periphery nuclei of round cells appeared and still more peripherally more or less formed fibrous tissue. In other words, exactly the same process occurred here as in rheumatic exudation elsewhere. The essential element in the rheumatic nodule was a formation of inflammatory fibrinous exudation, not of fibrous tissue. It would depend upon the severity and duration of the process whether or not fibrous tissue was formed; its formation was not a necessity. Microscopic sections of a rheumatic nodule stained with carbol-thionin and compared with sections of the pericardium in acute rheumatic pericarditis and of a valve with acute endocarditis stained in the same way showed that the changes were exactly similar. The rapid appearance and disappearance of these nodules in many cases strongly supported the view that in some cases they never passed beyond the stage of a fibrinous exudation. The name "fibrous nodules" applied to such nodules was unsatisfactory and it was better to use the term "subcutaneous" or "rheumatic."—Dr. W. S. COLMAN said that some years ago he had made sections of a rheumatic nodule which was only about three days old and found the same conditions as were described by Dr. Poynton and Dr. Still. There was exudation of fibrin between layers of normal areolar tissue and fat, but the fibrin was not organised. In older specimens nothing but fibrous tissue was to be seen.—Dr. H. D. ROLLESTON asked how far the explanation of the formation of the nodules would apply to erythema nodosum and whether Dr. Still and Dr. Poynton regarded this as rheumatic.—Dr. A. E. GARROD thought that Dr. Poynton and Dr. Still had clearly demonstrated the true nature of the nodules. He thought that erythema nodosum was of quite a different character to rheumatic nodules. Erythema was associated with arthritis, while the nodules were clinically always associated with valvular inflammation.—The PRESIDENT agreed as to the fibrinous nature of the exudation in early stages. He had examined nodules at a later period and the fibrous tissue of which they were then composed was of a peculiar homogeneous appearance. But pathologists were still in the dark as to what was the peculiar irritant which led to the escape of the coagulable material from the vessels. Erythema nodosum he looked upon as of a totally different character since it affected the skin itself and not the subcutaneous tissues, was accompanied by ecchymoses, and lastly because he did not believe that it had any connexion with acute rheumatism. There was often a certain amount of tenderness of the joints and even some mild arthritis with effusion, but the joint symptoms subsided with the disappearance of the erythema and he had never seen typical

acute rheumatism follow.—Dr. J. W. WASHBOURN also thought that erythema nodosum was not a rheumatic manifestation. He thought that each nodule would be found to contain the virus of acute rheumatism just as the periosteal nodes in typhoid fever had been shown to contain the typhoid bacilli.—Dr. POYNTON, in reply, said that he had never seen severe arthritis in erythema nodosum. The site of rheumatic nodules on parts exposed to friction and injury suggested that these might be factors in their causation. Examination for micro-organisms had proved unsuccessful.

Mr. D'ARCY POWER showed a specimen of Cystic Disease of the Breast in a boy aged three years. The breast with the surrounding tissue weighed just over an ounce after it had been hardened in formalin and alcohol and measured two and a half inches in length and breadth. The skin and nipple were absolutely healthy, the bulk of the swelling lying in the lower half of the organ. The section of the breast showed that a thick layer of fat was interposed between the skin and the pectoral fascia. The superficial portion of the fat was natural and of the usual consistency, the deeper portion being looser and containing numerous thin-walled cysts. The largest cyst was multilocular and roughly oval in shape, measuring after hardening one and a half inches in its long diameter and one inch in depth. It had a definite but thin wall, the deep surface lying upon the pectoral fascia. The inner side of the breast was free from cysts, but on the outer side there were many cysts, each with a thin but definite capsule. The smaller cysts were less loculated than the larger ones. Mr. Power considered that the specimen must be looked upon as a cystic lymphangioma occurring in the connective tissues lying between the breast and the pectoral fascia and that it was thus comparable with the congenital cystic tumours found in other parts of the body in children, especially in the neck, where they have long been known as hygromata.—In answer to Mr. SHATTOCK Mr. POWER stated that there was no history pointing to previous mastitis.

Mr. J. LAWRENCE and Mr. T. W. P. LAWRENCE exhibited a specimen of Hypertrophied Pituitary Body from a man who died at the age of 52 years. Symptoms had been present for six years, the earliest symptom being dimness of sight. The field of vision was contracted externally on both sides, and later alterations in speech and gait occurred with progressive weakness of the body generally. No signs of acromegaly were present. The enlargement affected the anterior lobe of the gland and the corresponding part of the pedicle, and the gland, which measured 3·5 by 2·5 centimetres, pressed upon and flattened the optic tracts, optic commissure, and the crura cerebri. Microscopically the tumour consisted of a delicate stroma of fibrous trabeculæ, separating large and intercommunicating spaces filled with epithelial cells. The cells were polygonal in shape, with large round or oval nuclei, and measured on an average 10 micro-millimetres in diameter.

Dr. H. D. ROLLESTON showed a specimen of Vacuolated Carcinoma of the Antrum. The superior maxilla containing soft growth which had invaded its walls was removed from a man aged 32 years. Symptoms had existed for 15 months. Microscopically the growth was indistinctly divided into lobules by delicate connective tissue septa. The lobules were made up of a meshwork, often remarkably regular, of delicate trabeculæ enclosing spaces. The trabeculæ were composed of round cells without any connective tissue basis. The spaces contained material presumably produced by the cells. The growth could be seen invading and absorbing the bony walls of the antrum. Ziegler had described and figured a tumour like this and referred to one in the lacrymal gland as "cylindroma carcinomatodes"; Thoma described with a plate a growth exactly like this under the title "hyaline degeneration of a round cell carcinoma of the mucous membrane of the antrum." It seemed more probable that this spheroidal cell growth arose from glands than from the lining mucosa of the antrum. The name "vacuolated carcinoma" was suggested as applicable to this kind of carcinoma.—Mr. CECIL BEADLES referred to two tumours of similar structure which he had met with. Both arose in the antrum.

Dr. STILL recorded three cases of Biliary Calculi in Infants aged nine months, eight months, and five months respectively. There had been no symptoms specially pointing to this affection during life, but in one case the child screamed frequently and drew up its legs as if with abdominal pain. There was no jaundice. The calculi were very small; the largest measured 3·5 millimetres by 2 millimetres; they were dingy black in colour and seemed in the two cases examined to consist of bile pigment with no trace of cholesterin. Another case occurred at the Hospital for Sick Children, Great Ormond-street, in which at the age of four years there were symptoms of severe biliary colic with jaundice and the boy had had several slighter attacks since, but no gall-stones had been seen. In addition to these cases 20 others had been recorded in which gall-stones were found in children up to 14 years of age. Of the 23 cases thus collected 10 were in infants who were either stillborn or dead shortly after birth, and no less than 14 of the whole number occurred within the first 10 months of life. In the new-born cases jaundice was almost always present. Biliary calculus must therefore be reckoned amongst the causes of icterus neonatorum of a severe and usually persistent variety; and, like the uric acid concretions of infancy, the passage of small biliary concretions was certainly an occasional cause, perhaps a more frequent one than was suspected, of screaming and drawing up of the legs in infants. The special liability to gall-stones in intra-uterine life and early infancy was probably the result of a tendency to stagnation of bile in the gall-bladder at this period, as evidenced by the viscid bile often found in infants; the muscular feebleness and inactivity of the diaphragm in intra-uterine life favoured this stagnation.—The PRESIDENT agreed that biliary concretions were probably the cause of some cases of colic in infants.—Dr. GARROD said the calculi corresponded with the deposits of "bilirubin sand" which occurred in adults in the bile-ducts and asked if the bile-ducts had been examined.—Dr. STILL, in reply, said that neither in his case nor in those which he had collected had anything been found in the bile-ducts.

Mr. CECIL BEADLES showed a series of specimens from insane patients: 1. Hæmorrhage into the Suprarenal Body from a woman who died after three days' illness, the symptoms being those of collapse. He had met with the condition in three other cases. None of them showed any symptoms which suggested that there was any affection of the suprarenal. 2. Specimens from a case of Addison's Disease, which was very rare in the insane, there having been only four cases out of 27,000 admissions. There was typical calcified fibrotic degeneration of the body and some tubercle follicles. There was marked bronzing of the skin, but the other symptoms were masked.

The following card specimens were exhibited:—

Mr. CECIL BEADLES: (1) Heart from a case of Cerebral Embolism; (2) Sarcoma affecting the Pancreas, Suprarenal Bodies, and Lungs; and (3) Lipoma of the Groin.

Mr. T. W. P. LAWRENCE: Atrophy of the Pancreas in Diabetes.

## LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

*Exhibition of Cases and Specimens.*

A CLINICAL meeting of this society was held on March 24th, Mr. EDWIN LEE, President, being in the chair.

Dr. CHURTON showed: 1. A boy, aged eight years, whose sight had begun to fail on Oct. 2nd, 1898. On the 14th he was quite blind; on the 20th the left hand and leg were weak; on the 22nd the patient could not stand; and on the 26th he was admitted into the Leeds Infirmary. He was found to be well nourished and very intelligent. The patient had anosmia. The pupils were dilated; there was no light reflex; and double optic neuritis was present. There was left hemiparesis. There was no headache or vomiting. The family were susceptible to tuberculous infection. There was a supposed tuberculous mass about the chiasma and right crus. One grain of iodoform and two grains of extract of gentian were given in a pill every four hours. Ordinary diet was given. Improvement began in a few days. On Dec. 2nd he could count his fingers and walk a few steps. He could now read and could stand on the left foot singly. His grasp was normal. 2. A case of Suspected Foreign Body in the Left Bronchus, with skiagram. 3. A woman, aged 36 years, a sorter of foreign rags, with Splenomegaly in the first stage. The spleen was much enlarged. She had ascites, also œdema of the feet. Her health otherwise was fairly good. There was no marked

anæmia. The patient showed impatience of treatment by rest, &c., commonly observed in these cases.

Dr. BARRS showed: (1) A case of Malignant Disease of the Liver; (2) Obstructive Jaundice with an Abdominal Tumour; (3) Ataxic Paraplegia; and (4) a series of interesting Lantern Slides of Various Clinical Cases under his care.

Dr. CHADWICK showed: (1) Two cases in the First and Second Stage of Pseudo-hypertrophic Paralysis, with photographs from a case at present in the third stage; (2) Tuberculous Disease of the Skin under Treatment with Beiersdorf Salicylic Acid and Creasote Plasters; (3) Lead Paralysis with Increased Knee-jerks; (4) Painless Enlargement of the Liver (diagnosis?); (5) Simple Pemphigus (congenital, with absence of the nails); and (6) Malignant Growth.

Dr. TREVELYAN showed the following cases: 1. Hemiatrophy of the Tongue in a lad, aged 15 years. Difficulty in articulation which was first noticed two and a half years ago was the most prominent symptom. Last June the lad saw that the left side of the tongue was shrunken. In the absence of other possible causes the atrophy was looked upon as due to a peripheral neuritis of the hypoglossal nerve. The palate and larynx were healthy. 2. Myxœdema in a man, aged 50 years, who had been under treatment for some years and whose weight had been systematically recorded. There were no obvious signs of myxœdema at present, but a couple of months ago the thyroid treatment had been omitted for several weeks when the symptoms began to return and the patient put on a stone in weight. 3. Ataxic Paraplegia in a man, aged 32 years. There were marked incoördination, exaggerated knee-jerks, and ankle clonus, but no pains, no loss of the light reflex, no vesical disturbance, and no impairment of sensation. 4. Locomotor Ataxia in a man, aged 44 years, with a previous history of syphilis to contrast with the last case.

Dr. TREVELYAN and Dr. DEWHIRST showed a series of six cases of Cardiac Valvular Disease in children ranging in age from five to 16 years. There was a definite history of acute rheumatism in three cases and of doubtful rheumatic pains in a fourth case. The cardiac lesion appeared to follow upon scarlet fever in the case of a boy, aged 12 years. In a lad, aged 14 years, without previous rheumatism there was a loud systolic murmur of maximum intensity over the pulmonary region, together with a systolic thrill suggesting pulmonary stenosis. One child, aged nine years, presenting signs of mitral stenosis developed a loud diastolic murmur while under observation, but without other evidence of aortic disease. In only one of the cases were there any marked cardiac symptoms and in three there were hardly any symptoms which could be directly referred to the heart.

Mr. WEST (Morley) showed two cases of Congenital Paraplegia and Hemiplegia occurring respectively in a brother aged eight years and a sister aged five years. There was no evidence of congenital syphilis. Birth had been difficult but not instrumental. A considerable degree of microcephaly was present in the girl.

Mr. E. WARD showed two cases of Enucleation of the Prostate. In both there had been complete retention of urine. Suprapubic cystotomy was performed; the prostate capsule was opened on each side by means of Loewenberg's forceps and each lateral lobe was shelled out with the forefinger. Each cavity was packed with iodoform gauze and the whole bladder was filled with gauze to retain the plugs *in situ*. In one case the right lobe weighed one ounce and the left rather more than half an ounce. In the other case each lobe was quite twice as large as those of the first case, but they were not weighed. Both patients were entirely relieved, micturition being easy and natural. In one case, a man, aged 56 years, the whole of the urine passed per urethram in 14 days after the operation.

Mr. LITTLEWOOD showed: 1. A case of Gastric Dilatation due to Adhesions about the Outer Portion of the First Part of the Duodenum. The patient was a man, aged 27 years. For two and a half years he had suffered from a dilated stomach. He had great distension after food and troublesome palpitation with difficulty in breathing. He had lost two stones in weight. He was under treatment for a long time before operation. Operation was performed on Nov. 5th, 1898. There was no obstruction at the pylorus. The pylorus and the first one and a half inches of the duodenum were freely moveable and formed a sharp angle with the other part of the duodenum, caused by the displacement downwards of the distended stomach. There were some very firm adhesions crossing the outer portion of the first part of the duodenum, extending from the under surface of the liver and gall-bladder to the colon. These were divided. There were no gall-stones in the gall-bladder. The patient made a good recovery, getting up at the end of three weeks. Since the operation he has worked as much as twelve hours a day and has put on two stones in weight and has none of his old discomfort. 2. A case of Pyloric Stenosis. The patient was a man, aged 48 years. For three years he had suffered from pyloric obstruction. He had vomited almost daily and lately practically every night, often a "pot" full. He had lost one and a half stones in weight during the past 18 months. On Jan. 5th, 1898, pyloroplasty was performed. There were adhesions of the duodenum, to the pylorus, and surrounding structures. The pyloric opening was very narrow, the transverse measurement of the mucous lining not measuring half an inch. He was fed by nutrient enemata for 16 days. A little fluid was given by the mouth on the fifth day, the quantity being increased daily. Some solid food was given on the eleventh day. He got up at the end of three weeks. He has gained one and a half stones since the operation. 3. A patient who had had a Calculus Removed from the Common Bile Duct. The patient was a man, aged 50 years. He had suffered for two years from repeated attacks of biliary colic, coming on once or twice a month. A gall-stone measuring seven-eighths of an inch in its longest diameter and one and five-eighth inches in circumference was removed from the common bile duct. Recovery ensued. 4. A case of Splenectomy for Malignant Disease. The patient was a woman, aged 26 years. The tumour was first noticed in December, 1897. On August 1st, 1898, the spleen was removed. The patient made a good recovery and is now apparently quite well. 5. Two cases of Contraction of all the Flexor Muscles of the Forearm treated by operation. The first patient was a girl, aged eight years. She had fracture separation of the lower epiphysis of the humerus (left). When the splint was removed the inter-phalangeal joints could not be straightened out and this condition of flexion continued to get worse. Operation was performed on Dec. 5th, 1898. All the tendons were lengthened an inch. A second case occurred in a girl, aged six years, and was treated by the same method. 6. A case of Fracture of the Patella treated by Barker's Method. The patient, a man, aged 27 years, was operated upon 24 hours after the fracture. The fragments were separated about one and a half inches and there was a large effusion of blood in the joint. He commenced to walk eight weeks later and now can use the joint as freely and as well as the other. 7. A case of Cancer of the Breast of seven years' duration. The patient was a woman, aged 79 years. She first noticed a lump in the breast seven years ago. It had not increased much in size during the last three years. It is now ulcerated on the surface and there are some enlarged axillary glands. 8. A case of Removal of Half the Tongue, Half the Lower Jaw, and several Lymphatic Glands about the Right Side of the Lower Jaw in one Mass for Squamous Epithelioma. The patient was a man, aged 51 years. He was operated upon on Nov. 8th, 1898. He said that he was quite well five weeks before that date. At present there is no recurrence. 9. A case of Chronic Tuberculous Disease of the Wrist treated by Scraping and Iodoform Injections. The patient was a man, aged 35 years, a clerk. He had tuberculous disease of the right wrist of 19 years' duration. He had been under treatment since Oct. 7th, 1898. At that time there were three or four discharging sinuses about the wrist. The parts were thoroughly scraped and packed with iodoform. Most of the carpal bones were carious and were removed. He had had numerous injections of iodoform since that time. He can now use the hand and writes with it well.

Mr. W. H. BROWN showed: 1. Six cases of Osteotomy, one being for Vicious Union following Simple Fracture of the Femur. The right foot was turned in and interfered with walking. 2. A patient who had been run over. Both legs were amputated, the one through the knee-joint and the other through the middle of the leg. 3. A case of Intestinal Intussusception in a child aged three years. Laparotomy was performed. The intussusception, which was of the ileo-cæcal variety, was reduced. The patient made an excellent recovery. 4. A case of Fractured Patella treated with a back splint followed by plaster bandage. Firm bony union resulted. 5. A case of Compound Depressed Fracture of the Skull. The bone was fractured in the left parietal region. The skull was trephined and the bone was elevated. The

patient was unconscious for some weeks and was then found to be paralysed on the right side. Eventually the paralysis of the arm and leg passed off. 6. A Plastic Operation to correct deformity following extensive burns in the neck.

Dr. BRONNER showed (1) a case of Traumatic Symblepharon of both eyelids treated by hot fomentation; (2) three cases of Mastoid Disease after operation; and (3) a case of Nystagmus and Convergent Strabismus treated by advancement of the external recti muscles.

Dr. S. LODGE showed three cases of High Myopia treated by removal of the lens.

Mr. KNAGGS showed (1) a case of Pyonephrosis treated by Nephrotomy; the patient also had albuminuric retinitis; (2) a case of Removal of the Lens for High Myopia; and (3) a patient who had sustained a severe Compound Fracture of the Left Leg and Fracture of the Right Femur. Some of the nerves apparently were implicated in the callus around the femur.

Mr. V. HARTLEY (for Mr. NUNNELEY) showed (1) a case of Retinitis with a Series of Charts illustrating the gradual recovery of fields of vision; (2) a case of High Myopia with Extensive Choroiditis and Recent Hæmorrhages in Each Eye; (3) a well-marked case of Superficial Central Choroiditis; and (4) three cases of Mules' operation.

Mr. SECKER WALKER showed (1) a case of Subsiding Optic Neuritis due to plumbism of 12 months' duration; (2) a Congenital Coloboma of the Iris and Choroid up to and including the Fovea affecting both eyes; (3) a Congenital Cyst of the Orbit with Anophthalmos; (4) Congenital Absence of the External Auditory meatus with deformed pinna: the patient could hear a watch placed on the mastoid; (5) an advanced case of Retinitis Pigmentosa in a child, aged 10 years, with very contracted fields of vision (there was no history of similar disease in the other members of the family); and (6) an Albino.

## ROYAL ACADEMY OF MEDICINE IN IRELAND.

### SECTION OF SURGERY.

*Diseases of the Foot.—Perforating Gastric Ulcer.*

A MEETING of this section was held on March 3rd, Mr. R. L. SWAN, the President, being in the chair.

Mr. W. I. DE COURCY WHEELER read a paper on Some Diseases of the Foot. Having described the anatomical points bearing upon the subject he detailed five cases of complete excision of the os calcis followed by the most satisfactory results; one case of excision of the os calcis and astragalus with portions of the tibia and fibula; 13 cases of medio-tarsal operation, or Chopart's operation, all showing favourable results; also three cases of complete excision of the astragalus for disease, besides others for compound dislocation. There was a brief record of 39 cases after Syme's operation, also results after Tripier's operation, which Mr. Wheeler was of opinion had as many advantages over the subastragaloid operation as Chopart's had, but had not the advantages claimed over the medio-tarsal operation. The paper concluded by a description of metatarsalgia, Madura foot and two cases of podelcoma. One case completely recovered, the second had a recurrence of the disease. There was no history of any constitutional or predisposing cause why the foot was attacked by this painful disease.—Mr. H. G. CROLY considered Chopart's operation very good because if the disease was confined to all the bones in front of the medio-tarsal line a sound astragalus and os calcis were left. Podelcoma required amputation of the foot. Nélaton's perforating ulcer of the foot was a rare affection and was connected with certain forms of neuritis and was sometimes in connexion with a diabetic condition of urine. Perforating ulcer might be easily overlooked and was very unfavourable for dealing with.—The PRESIDENT said that some years ago almost any tuberculous disease of the foot was condemned, generally speaking, to a Syme's amputation. He considered this to be an extremely erroneous practice, more especially in tuberculous disease, as it could now be distinguished by the x rays. He considered that any tuberculous disease of the metatarsal bone at least should not be submitted to any operation except upon the bone itself, and many cases of tuberculous disease were confined to the metatarsal bones. The literature of the subject seemed to show that tuberculous disease of the os calcis was in reality the tuberculous disease of the foot which could be most frequently attacked with success.—Mr. T. MYLES, Dr. HENRY FITZGIBBON, Mr. CHANCE, and Sir FRANCIS CRUISE also took part in the discussion.

Mr. T. MYLES read a paper on Perforating Gastric Ulcer. Amongst the most interesting of the cases on which he had operated was that of a man, aged 72 years, who after the reduction of an umbilical hernia developed symptoms of perforation. The patient was under the care of Sir Francis Cruise and Dr. Moran. When Mr. Myles was called in the patient was sinking rapidly, with great pain and tenderness, persistent vomiting of black tarry matter, evidently blood, complete absence of liver dulness, tympany, &c. Operation seemed hopeless, but it was undertaken in consequence of the dreadful agony which the patient was suffering. The perforation was easily found and sutured and the abdomen was freely douched with hot saline solution. The patient made a complete recovery.—Sir F. CRUISE bore out all that Mr. Myles had said in his paper. The patient was almost pulseless at the commencement of the administration of the chloroform; the pulse became much better when the chloroform was changed to ether.—Mr. CHANCE mentioned the case of a young woman with gastric ulcer who suddenly became collapsed with symptoms of perforation. Laparotomy was at once performed but thorough examination of the stomach revealed nothing. The abdomen was closed and recovery followed.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY.—An ordinary meeting of this society was held at 20, Hanover-square, W., on March 23rd, Dr. R. Fortescue Fox, the President, being in the chair.—The adjourned discussion on the papers by Dr. Douglas Kerr on the Treatment of Diseases by Heat and Dr. Hedley on the Therapeutics of Heat was resumed by Dr. Harry Campbell who referred to the importance of keeping the sick-room warm.—Dr. Bain said that nearly all the varieties of hot baths lower both the maximum and the mean arterial blood-pressure. He had applied a box of super-heated air of 300° F. to the right hind leg of a dog and had found that the blood-pressure tracing showed an initial rise in blood-pressure with a subsequent fall. At the same time both femoral veins were exposed and thermometers were inserted, the dog being under an anæsthetic. After the lapse of half an hour the blood coming from the limb in the super-heated box was 4·8° F. higher than in other parts of the body. Dr. Bain drew attention to the initial rise in blood-pressure, as he considered that a word of caution was necessary in submitting patients with diseased arteries to this method of treatment.—Dr. Léon Blanc said that in cardiac disease he had used for more than 25 years without accident only tepid douche massage at 95° F. during 10 minutes, believing that great heat was not advisable. In gouty people he thought the true attack of gout came on only when the kidneys did not act. If very hot baths or dry hot exposure be given the patient had a profuse perspiration, the kidneys did not act so well, and by the poisoning action of the retained uric acid an attack of gout arose, so that he advised hot vapour baths (called "Bertholet" at Aix) at 108° F. only for local application to joints as a means of relieving pain, and never hot baths for general treatment, but only the tepid douche massage from 92° to 98° F.—Dr. W. Ewart said that he would be the last to deny the advantages to be gained by the use of intense heat in suitable cases, but he felt considerable diffidence as to its general employment in gout and gouty affections with their dangerous cardio-vascular and renal factors. The opposite method, the treatment by cold—viz., by the application of ice—was capable of yielding results no less remarkable as a local treatment in a definite class of cases and particularly in some forms of rheumatoid arthritis.—Dr. Heinemann said that in giving baths he got better results by the use of the higher temperatures. He found that cardiac cases did not do so well in baths at temperatures from 31·5° R. to 32·5° R. (from 103°. to 105° F.) as in baths at temperatures of from 33·5° R. to 35° R. (from 107° to 111° F.) to commence with.—Dr. Knowsley Sibley, Dr. Haig, and Dr. Alexander Morison also took part in the discussion.—Dr. Hedley, in his reply, expressed the opinion that in addition to the heat rays all the rays of the visible spectrum could be made useful for therapeutic purposes. There were, however, some rheumatoid cases of old standing which resisted all treatment of the kind.

KIDDERMINSTER MEDICAL SOCIETY.—A meeting of this society was held on March 17th, Mr. S. Stretton being in the chair.—It was unanimously resolved to confirm the resolution of the Liverpool Medical Institution with regard to vaccination.—Mr. J. Lionel Stretton showed: 1. A Calculus removed by Suprapubic Lithotomy from a boy aged six years. Although no sutures were used the wound was soundly healed in 16 days. 2. An Ovarian Cyst with Twisted Pedicle removed from a woman aged 43 years. She was admitted with symptoms of intestinal obstruction which dated from a strain three weeks previously. There were evident signs of acute peritonitis and no extensive examination was possible. The cyst contained about a pint of fluid and was jammed in the pelvis obstructing the bowel; degenerative changes had commenced in its wall owing to the twist in the pedicle and there was some general peritonitis. The patient progressed satisfactorily to the end of the third day when she had a sudden attack of syncope which proved fatal. No necropsy could be obtained, but an examination of the abdominal contents revealed nothing abnormal. Mr. Stretton also read notes of the case of a girl, aged 21 years, who was admitted with Symptoms of Acute Peritonitis dating from a strain two months previously. Her abdomen began to swell three weeks ago and Mr. W. Moore who attended her found an inguinal hernia on each side; the right one was reduced, but the left one only partially. On opening the abdomen she was found to be suffering from extensive tuberculous peritonitis with considerable thickening and adhesion of the omentum and nothing attributable to the herniæ, as was expected.—Dr. Evans read notes of a case of a man, aged 36 years, who was admitted with Indefinite Abdominal Symptoms. The bowels which had not been moved for a week were relieved with an aperient, but he gradually became worse and died a fortnight after admission. Post mortem the intestines were found to be distended and congested and covered with flakes of lymph. The liver was immensely large and hard and on section it was seen to be involved with a soft diffuse growth. Behind the stomach was a large glandular tumour (lymphosarcoma) of the size of a year-old child's head; it was firmly fixed to the spinal column and could not be removed. Chains of infected glands ran down each side. Dr. Evans commented upon the extreme rapidity of the growth and the indefinite symptoms accompanying it. The question of operation did not arise as the patient's condition after admission was too serious.—Dr. B. Addenbrooke read a paper on Town Cow Byres and their Influence on the Number and Variety of Microbes in Milk.

CLINICAL SOCIETY OF MANCHESTER. — A meeting of this society was held on March 21st, Dr. A. Hill Griffith, President, being in the chair.—Mr. T. R. Jessop (Leeds) opened a discussion upon Aseptic *versus* Antiseptic Surgery. After referring to the bad results of the treatment of wounds in pre-antiseptic days he traced the origin and growth of Listerism and called attention to the evil effects which sometimes followed the excessive use of antiseptics. It came to be recognised after a time that once asepticism was reached antiseptics became not only useless but harmful and upon this principle aseptic surgery was founded. Aseptic surgery might be said to differ from antiseptic surgery in that it dispensed with the use of unnecessary antiseptics. In his own practice he relied upon the use of heat for the sterilisation of the instruments and dressings and upon soap-and-water with the use of the nail-brush and turpentine for the disinfection of the skin. Afterwards the part was flushed with sterilised water and the latter was used throughout the operation. In concluding Mr. Jessop formulated the following propositions: (1) septic infection was the most universal and the most potent influence in the prevention of the healing of wounds; (2) a state of complete asepsis should be the supreme aim in all operations; (3) when an aseptic condition had been brought about the further application of antiseptics was useless and might be harmful: (4) attention should be directed to the rendering aseptic of the patient's skin, the instruments, ligatures, sutures, and dressings, and the surgeon's, assistants', and nurses' hands, arms, and dress; (5) an operation wound, clean and not infected by sinuses or other causes, would heal best when washed only with water sterilised by boiling; and (6) the germs contained in the atmosphere of a clean operating theatre were ordinarily so attenuated as to call for no special provisions.—Mr. G. A. Wright, Dr. E. T. Milner, Mr. Stanmore Bishop, Dr. Braddon, Mr. Westmorland, Dr. Wahltuch, Dr. Thomas Harris, Dr. T. A. Helme, Dr. S. Buckley, and Dr. Fothergill took part in the discussion which followed.

IPSWICH CLINICAL SOCIETY.—A meeting of this society was held on March 9th, Mr. S. O. Eades, President, being in the chair.—The President read a paper on Difficult Cases of Face Presentation and their Management. Two cases which occurred recently in his practice were described; one in the mento-læva anterior position resulted in an easy natural delivery; the other in the mento-dextra posterior position was a most difficult case and craniotomy had eventually to be performed.—Mr. Hoyland showed a lad with a Cyst-like Growth of the size of an orange situated over the middle of the sternum. The condition was present from birth and the cyst was probably a "dermoid."—Mr. Fryer showed a man with a Cystic Growth of the size of a fives ball growing from the soft palate.—Dr. H. H. Brown showed a specimen from a case of Intestinal Obstruction in which the patient died after the constricting band had been successfully divided. The importance of an early diagnosis in such cases was emphasised.—Dr. Brown also read notes of a remarkable case of Suppression of Urine. The patient was a woman and the illness began with headache, pain in the abdomen, sickness, diarrhœa, and cramps in the legs and abdomen. On the first two days only one ounce of urine was passed; on the third and fourth days from two to three ounces were passed; and on the fifth day five ounces. At the end of the week 15 ounces were being passed. The amount then rapidly increased to 23, 35, and 50, up to 80 ounces per diem, and then gradually diminished to about normal. A remarkable feature of the case was that apart from some headache the patient did not appear to suffer any inconvenience from the suppression nor did she look at all ill after the initial symptoms had subsided. The treatment adopted consisted mainly of hot vapour baths and subcutaneous injections of pilocarpine.—Mr. Pridmore showed a specimen of a Blighted Ovum. The specimen showed hæmorrhage into the placental tissue, forming bosses on the surface, a twisted funis, and a fœtus of about one inch in length.—Dr. Sinclair read notes of a fatal case of Plastic Orbital Cellulitis.

BEDFORD MEDICAL SOCIETY.—A meeting of this society was held on March 30th, the President, Dr. Bower, being in the chair.—The President gave an interesting introductory address on the Changes in the Treatment of the Insane during the Nineteenth Century.—A resolution was adopted, "That the operation of the Vaccination Act, 1898, will be prejudicial to the public safety and that its amendment is urgently required."—Dr. S. J. Ross showed a girl, aged 17 years, suffering from Friedreich's Disease. Two years ago she began to lose power in her legs and for the last year the movements of her hands and arms had become affected. There were tremors of the head and slight lateral nystagmus. The patellar reflexes were lost and the plantar were increased. Speech was slow and hesitating and her mental processes were defective. She was one of a large family and a brother, aged 25 years, began to lose power in his legs at 15 years of age and at the present time was unable to walk.—Dr. Skelding read notes of a case of Herpes Ophthalmicus followed by a Relapsing Iritis occurring in a gouty man, aged 38 years. He remarked on the frequency with which iritis followed herpes ophthalmicus and stated that herpes was said to occur more frequently on the right side.—In the discussion which followed members expressed doubts as to whether herpes ophthalmicus was commonly followed by iritis and also whether herpes was more common on one side than the other.—Dr. Hartley showed a specimen of Hydrocele of the Cord which he had removed and read notes of the case.—Mr. Nash showed: (1) Adenoma of the Thyroid; (2) two large Gall-stones which together formed a cast of the gall-bladder and weighed an ounce (at the operation it was found that one had become turned round in the gall-bladder); (3) two Cancerous Breasts removed by Halstead's method; and (4) Specimens removed from three cases of Recurrent Appendicitis during the quiescent period.

CHELSEA CLINICAL SOCIETY.—A meeting of this society was held on March 21st, Mr. J. Foster Palmer, President, being in the chair.—Mr. A. F. Penny read a paper on Radical Cure of Hydrocele and showed a case

in which he had performed excision of the tunica vaginalis two years previously for old-standing hydrocele, no recurrence taking place. He contrasted the injection method with those of excision and incision and expressed the opinion that the latter mode of treatment was more in accord with modern surgical principles.—The President, Dr. J. D. E. Mortimer, Dr. Vincent Dickinson, and Mr. Nitch-Smith took part in the subsequent discussion.—Dr. Vincent Dickinson read a paper on Enteric Fever Complicated by Rigors and Exacerbations of High Temperature. He showed charts of two cases, in one of which severe rigors recurred at varying intervals until the sixth week. In the other convalescence had been established for three weeks, when rigors and exacerbation of temperature first commenced, and recurred at intervals of from four to seven days for five weeks, the temperature in the attacks ranging from 102° to 106° F. In neither of these cases could any special cause be assigned for the phenomena; they were in no way caused by constipation and there had not been any indiscretion in diet. Dr. Dickinson then referred briefly to the theories as to the causation of these attacks and thought they might be explained by the supposition of a saprophytic absorption from the bowels acting on the thermogenic centres which always showed a marked impressionability at the decline of enteric fever of long duration.—A discussion followed in which the President, Mr. A. F. Penny, Dr. Mortimer, and Mr. Nitch-Smith took part.—Dr. B. Abrahams read a paper on Modern Views in Neurology, after which a lengthy discussion took place.

MIDLAND MEDICAL SOCIETY.—The eighth meeting of this society was held on March 15th at the Medical Institute, Birmingham, the President, Mr. L. Lowe, being in the chair.—The following officers were nominated for election:—President: Dr. Rickards. Treasurer: Mr. Garner. Secretaries: Dr. Kauffmann and Mr. Christopher Martin. Members of Council: Mr. Bennett May, Dr. T. F. Chavasse, Mr. Jordan Lloyd, Mr. Henry Eales, and Mr. J. W. Taylor.—Dr. Nelson read a note on Medical Bookkeeping without Books, in which the miseries of the visiting list, ledgers, and bill-making were detailed and the simplification of matters by the American card system (as organised by the Literary Bureau Company) demonstrated.—Dr. Stacey Wilson read a paper on the Treatment of Chorea.—Mr. Lawson Tait read a paper on Ectopic Gestation.

# Reviews and Notices of Books.

*The Diseases of the Stomach.* By WILLIAM W. VAN VALZAH, A.M., M.D., Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic Medical School and Hospital, and J. DOUGLAS NISBET, A.B., M.D., Adjunct Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic Medical School and Hospital. London: The Rebman Publishing Company, Limited. 1899. Illustrated. Pp. 674. Price 20*s*.

As an introduction to our notice of this work we cannot do better than quote the opening words of the authors: "The chief excuse for the existence of a book is its individuality. While it is true that the definitive features of a book are the individual views of the author the great mass of a complete work on the diseases of the stomach must consist of the results of research gathered all along the course of medical history. A complete book on this subject for the use of students and physicians should contain what of knowledge there is of practical value in the past, what of truth there is in the literature of to-day, and what of information the author may have to contribute." Acting on these lines the authors may be congratulated on having produced the best monograph on Diseases of the Stomach which we have seen. Rarely have we read a work on a special subject with so much interest. The book is a large one and is replete with information; whilst theory is fully dealt with the whole tone is essentially practical and it consequently forms a most valuable work of reference for the practitioner. The disorders of digestion are amongst the most common of the ills that flesh is heir to but are also most difficult to treat. The physiology of digestion and the principles of dietary must be fully understood in order that correct deductions can be drawn as to the successful treatment of the many forms of indigestion, and Dr. Van Valzah and Dr. Nisbet give very full instruction on these points. The book is divided into six sections which are subdivided into chapters.

Section I. is headed Introduction and Classification. The reader must expect to be confronted with many terms which are not met with in ordinary text-books, such as "adenohypersthenia gastrica," "adenasthenia gastrica," &c; but the multiplication of such terms is fortunately not so numerous as is to be found in other recent publications. The classification adopted is a sound one embodying the data of physiology and pathology, and the common error of mistaking a condition for a disease is avoided.

Section II. deals with Diagnosis and Diagnostic Methods, different chapters being devoted to Clinical History, Physical Signs, Functional Signs (Secretion, Motor Function, and Absorption), the Bacteriological Signs, and the Anatomical Signs, so that from a clinical point of view the arrangement is most complete. Much stress is naturally laid on the examination of the contents of the stomach and full directions are given for the necessary procedure.

Section III. is entitled "General Medication." The subject is discussed under the following divisions: Digestive Hygiene, Diet, Physical Remedies, Symptomatic Treatment, Physiological Treatment, Bacteriological Treatment, and Chemical Treatment. Certain general indications are first laid down which have to be met by the selection of a diet, the first of which alone, if duly followed, would lend the physician great aid in the treatment of gastric disorders. It runs as follows: "The quantity of food should be sufficient to supply the needs of nutrition, and the composition of the diet should approach as nearly that of the normal diet as the variety of the disease of the stomach will permit"; and another rule insists that "the directions should be complete and explicit, and should be changed to meet the daily indications." Most students in completing the educational curriculum and becoming fully qualified medical men are inexperienced in the principles of diet in disease and they find great difficulty in giving the necessary directions to patients or their attendants. In the pages of the work now under consideration no pains are spared to make the information as full and intelligible as possible. Some readers may naturally ask what is meant by "bacteriological treatment"? Three points are mentioned: (1) chemical antisepsis; (2) removal and exclusion of the germs; and (3) change of the culture soil and removal of the pathological conditions which favour the growth of germs. Chemical antisepsis is with some practitioners a very popular method of treating gastric fermentation, but it is the least efficient and most injurious. The removal of the germs is more than a palliative measure, for it places the stomach in a position to perform its functions unmolested. To achieve this result there is no method comparable to washing out the stomach.

Section IV. describes fully the Diagnosis, Treatment, &c., of the Dynamic Affections of the Stomach. The classification adopted will be found to be new, at any rate to English readers. In Chapter 1 are considered the Sensory Dynamic Affections—bulimia, acoria, parorexia, anorexia nervosa, gastralgia nervosa, and hyperasthenia gastrica. The clinical descriptions are especially good. Chapter 2 deals with the Dynamic Affections of Secretion, and Chapter 3 with the Motor Dynamic Affections, such as spasm, eructatio nervosa, habitual regurgitation, nervous vomiting, &c. In Chapter 4 an excellent account is given of Neurasthenia Gastrica, the

clinical description and differential diagnosis being particularly well written, and the same may be said of the chapter on Myasthenia Gastrica.

The Anatomical Diseases of the Stomach are described in Section V. These include the various forms of gastritis, ulcer of the stomach, neoplasms of the stomach, displacement of the stomach, and obstruction of the orifices.

Section VI. is entitled "Vicious Circles of the Stomach." Under this head is discussed the condition of "other organs in the diseases of the stomach, or the stomach in the causation of disease"; thus we find sub-sections headed Influence on the Intestines, Influence on the Nervous System, &c. Finally a chapter is devoted to the consideration of the Secondary Diseases of the Stomach. These are produced by the diseases of a large number of other organs and as a rule, but not always, bear no marks which would reveal or suggest their origin. These considerations are fully entered into, completing a volume which forms a most valuable addition to medical literature.

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*Recent Methods of Sewage Disposal in England.* By A. E. SILK, C.E., Sanitary Engineer, Bengal. Calcutta: Bengal Secretarial Press.

THE object of this pamphlet appears to be to promote discussion as to the desirability of introducing into India some form of biological filters for the treatment of sewage. The constituents of sewage in English towns are first glanced at, so that a comparison may be formed with those of the sewages common throughout India. A short sketch is given of some of the methods adopted in England within the last few years, including Mr. Dibdin's experiments at Barking and Sutton, Mr. Donald Cameron's septic tank at Exeter, and the filters of Mr. I. Garfield, C.E., at Wolverhampton. Mr. Silk next proceeds to discuss the applicability of some such system to the conditions prevailing in India, which differ materially from those that obtain in England. Mr. Silk, writing for Indian readers, presupposes a knowledge of local details with which it is possible some of our English readers are unfamiliar. It will be better, therefore, first to mention that in India no system of sewerage as we understand it exists except in a few isolated cases. Any regular supply of water by pipes is only to be found in the houses of the rich. The use of commodes in India is common to Europeans. A coolie called a "mehter" collects the contents of these commodes in a large receptacle which is emptied into an iron cylinder mounted upon wheels and drawn by a bullock to the trenching ground. In the prisons these matters are simplified. Each prisoner uses two small bowls placed on the floor of the compartments into which the latrines are divided. The prisoner squats with these between the legs, one in front to receive the urine and one behind for the fæces. The bowls containing the solid excreta are collected and the contents placed in a large churn containing earth. The churn is then set in motion and its contents having been intimately mixed are superficially buried. The urine is thrown into a ditch or drain receiving the slop water. This method is found to be most successful. Some few of the barracks are now provided with a system of drainage, but commonly rows of earth-closets are employed. Earthenware vessels are used in place of iron pails, the contents of which are collected and disposed of in the usual way. The public latrines referred to by Mr. Silk are a constant source of despair to the engineer. The great aim has been to keep the solid constituents of the sewage apart from the liquid, so that the contents of the latrines, the removal of which to the trenching ground occurs once only in 24 hours, shall be less sloppy and repulsive than it otherwise would be, but this is found in practice to be most difficult to accomplish. Each native Indian, in compliance with a law of caste, uses one pint of water for ablution after relieving himself. In addition to this the latrines are used as public urinals, so that their condition in the presence of a dense population is better imagined than described. Some houses even have an earth-closet placed upon the roof, the liquid matter escaping down the pipes provided for the rain water. This, together with the household slop water, if not thrown upon the ground of the compound, runs off through a number of rough independent drains into ditches; whatever of it has not been lost through evaporation or by percolation into the adjacent tanks and wells reaches the river, which river is not infrequently the principal source of water-supply. The liquid matter from the public latrines is treated in the same way. This applies principally to the districts where the rivers form the natural drain to the land which rises on either side. Where the rivers pass through the plains and delta they are more elevated and the natural drainage is away from and not towards them. Here the slop water and the rain water from towns situated along the banks are frequently directed into some lake. Pits several feet deep used to be dug at the trenching grounds to receive the sewage; these were covered over with earth when full. It is needless to say how objectionable such a practice was found to be, the smell from these horrible heaps being carried by the wind for a mile or more. The present system is to dig a trench from one to three feet deep and to cover its contents with the earth from the next trench. This practice is but a slight improvement upon the previous one. More recent knowledge has shown that all effete organic matter must be buried quite superficially, as it is principally in the first few inches of the soil that bacterial life is most abundant and active. If buried deeply a very indefinite time elapses before its conversion into humus. It is therefore evident that the burial of such large quantities of organic matter at such a depth below the surface is inimical to success. Without any sufficient provision of subsoil drains to carry off the enormous amount of rainfall, often 60 inches in a few months, these grounds at such times can be little short of pestilential. The difference in the composition of the sewage is the first question to be considered, that in India being much more highly concentrated. This probably would not militate against success, though the construction of the filters might require modification to prevent clogging. It would at first sight appear that the form of filter best suited would be one in which the action was upwards. Mr. Silk has not in his pamphlet described such a filter, but several have been tried most successfully[1]; one especially now being fixed at one of our large regimental barracks would upon a smaller scale probably be well suited for use with each individual latrine. Mr. Silk contemplates some difficulty, as he states that it would be impossible to have an open bacteria filter bed exposed to the fierce rays of an Indian sun, though if by reason of its size it were impossible to protect it by roofing, still in any case the level of the effluent should be kept well below the surface of the filtering media. Those only are competent to judge in these matters who have a practical acquaintance with the requirements and conditions of the individual districts to be dealt with, which in a country such as India are most diverse. The question is one which has engaged the attention of many in this country recently. Professor W. J. R. Simpson, Professor of Hygiene at King's College, London, who has had great experience in Indian sanitation as Medical Officer of Health of Calcutta, is in favour of a continuance of the present porterage system of sewage removal to a point at which some form of

[1] See the Report of THE LANCET Special Commission on the Water-supply and Disposal of Sewage in Rural Districts, March 4th, 1899.

biological filter or tank might be placed before any more elaborate system of drainage is attempted, simplicity being of the utmost importance. This would not be considered as final, one only of the many evils at present existing being overcome thereby. The difficulty of cost is, of course, even greater in India than here, the reluctance of natives to spend money upon these matters being well known. Mr. Silk's pamphlet is educational and will certainly serve a useful purpose in promoting in India a knowledge of the more recent and natural methods of sewage disposal which are such a decided advance upon the older systems.

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*System of Diseases of the Eye.* By American, British, Dutch, French, and German Authors. Edited by WM. F. NORRIS, M.D., and CHARLES A. OLIVER, M.D., of Philadelphia, U.S.A. Vol. III. With 50 Full-page Plates and 186 Text Illustrations. London and Philadelphia: J. B. Lippincott Company. 1899. Pp. 962. Price 21*s.* net.

THIS volume is perhaps the most important of the "System," since it deals with nearly all the local diseases with the exception of those of the lens and is the one which will consequently prove most useful to the practitioner who is not devoting himself to the exclusive study of the diseases of the eye, whilst for the specialist it supplies a large amount of information on subjects which have recently been discussed in continental journals—information which is, as a rule, not very easily accessible. The several articles and their authors are in the following order:—Diseases of the Orbit, by Charles S. Bull, M.D., Professor of Ophthalmology in New York; Diseases of the Eyelids, by George C. Harlan, M.D., Surgeon to the Wills Eye Hospital, Philadelphia; Operations performed upon the Eyelids, by the same author; Diseases of the Lacrymal Apparatus, by Samuel Theobald, M.D., Ophthalmic Surgeon to the Johns Hopkins Hospital, Baltimore; Diseases of the Conjunctiva and Sclera, by Swan M. Burnett, M.D., Professor of Ophthalmology in the University of Georgetown; Diseases of the Iris and Ciliary Body, by W. A. Brailey, M.D. Cantab., Ophthalmic Surgeon to Guy's Hospital, and Sydney Stephenson, M.B. Edin., Ophthalmic Surgeon to the North-Eastern Hospital for Children; Diseases of the Choroid and Vitreous, by A. Hill Griffith, M.D. Aberd., Honorary Surgeon to the Royal Eye Hospital, Manchester; the Anatomy of Staphyloma Posticum and the Relation of the Condition to Myopia, by Isidor Schnabel, Professor of Physiology in the University of Vienna; Diseases of the Retina, by Joseph Schöbl, M.D., Professor of Ophthalmology in the University of Prague; Diseases of the Optic Nerve, by Johann Deyl, M.D., Professor of Ophthalmology in the University of Prague; Glaucoma, by Priestley Smith, M.R.C.S. Eng., Ophthalmic Surgeon to the Queen's Hospital, Birmingham; Wounds and Injuries of the Eyeball and its Appendages, by Emil Gruening, M.D., Ophthalmic Surgeon to the New York Eye and Ear Infirmary; Sympathetic Ophthalmia, by Robert L. Randolph, M.D., Ophthalmic Surgeon to the Johns Hopkins Hospital, Baltimore; and, finally, Operations usually performed in Eye Surgery, by Herman Knapp, M.D., Professor of Ophthalmology in Columbia University, New York.

Dr. Samuel Theobald's article on the Diseases of the Lacrymal Apparatus is carefully written and the numerous methods which have been proposed for the relief of stricture of the canaliculi and nasal duct are well classified and clearly described. He gives a drawing of a gold cannula which was introduced into the nasal duct of a woman by his grandfather and which remained in position for no less a period than 25 years. Dr. Theobald adopts Sir William Bowman's proceeding of slitting up the canaliculus, operating in general upon that of the lower lid. Considerable experience has led us, unless great discomfort is experienced by the patient, to be content with the occasional passage of moderate-sized probes. Slitting up the canaliculus sometimes does more harm than good and the introduction of very large probes which seems to have proved very serviceable in Dr. Theobald's hands does not always prevent lacrymation, the condition which the instruments were designed to cure. He has also practised with success the passage of probes through the lower orifice of the nasal duct, a proceeding which on account of its difficulty has fallen into disuse. In the article devoted to Diseases and Operations upon the Eyelids Dr. George Harlan gives many drawings illustrating the various incisions which have been adopted for the cure or relief of entropion and ectropion. Dr. Knapp's account of the operations on the eye in common, though they overlap the statements made in other parts of the "System"—as, for instance, the article just referred to by Dr. Theobald—are yet, owing to his large experience, worthy of careful perusal.

The Diseases of the Iris and the Ciliary Body are described jointly by Dr. Brailey and Mr. Sydney Stephenson. The affection termed "keratitis punctata" is considered at some length. Until a recent period the grey circular spots arranged in the form of a triangle with the base towards the periphery of the cornea and on its inner surface have been considered to be due to the proliferation of the cells lining the membrane of Descemet, but they are now regarded according to these authors as deposits thrown as it were against the posterior surface of the cornea from the aqueous humour and as primarily coming from the ciliary body and are hence to be regarded as the products of cyclitis. Examined microscopically they consist of collections of round nucleated cells cemented together by a varying amount of fibrinous material. This view does not explain very satisfactorily their discrete yet regular arrangement, their long persistence in an unchanged form, and their little disposition to coalescence such as might be expected if they were either growing *in situ* or were the result of a kind of precipitation from the aqueous. Hermann Snellen believes that they contain micro-organisms capable of being grown upon agar-agar. In discussing irido-cyclitis, instead of giving the usual division into serous, plastic, and purulent, the authors adopt an etiological classification admitting primary, secondary, and sympathetic causes and dividing the primary causes into syphilitic, rheumatic, gonorrhœal, gouty, diabetic, herpetic, malarial, climacteric, cerebral, scrofulous, tuberculous, traumatic, post-febrile, cachectic, and idiopathic—a division which enables them to consider most of the forms of iritis in an orderly fashion, though, as they themselves admit, the disease may be attributed to many other causes if isolated recorded cases are taken into consideration, such as albuminuria, and dental, nasal, or uterine troubles. The article on Diseases of the Retina is one of the longest in the book and is from the pen of Dr. Joseph Schöbl, the Professor of Ophthalmology in Prague. It has been well translated into English by Dr. Adolf Alt, and in the extent and variety of the information which it contains it constitutes sufficient evidence of the advances, due to the employment of the ophthalmoscope, which have been made in the diagnosis and treatment of diseases of the eye during the last 50 years. A few pages are devoted to retinal affections in the classical treatises of Mackenzie, Lawrence, and Middlemore. Dr. Schöbl calls attention to the fact that the ophthalmoscopic examination of the eye affords a very reliable test of death, for just at death the papilla is blanched, the whole fundus suddenly pales, the arteries become narrow, and the veins empty centripetally, their blood columns breaking until they resemble a string of beads. Half an hour after death the fundus of the eye is yellowish-white, the papilla is chalky-white,

the arteries are invisible, and the veins are thin and almost empty. Dr. Schöbl describes no less than four forms of senile degeneration: a form in which the retina appears veiled, especially about the disc, with in some instances dull grey points and molecular masses and in others round, highly refractive bodies; a second form, due to colloid excrescences of the lamina vitrea of the choroid; a third associated with retrogressive changes characterised by the presence of crystals of carbonate of lime or of cholesterin, the opthalmoscopic appearances resembling those of retinitis albuminurica; and a fourth form in which numerous plaques coalesce in the circumpapillary region forming a whitish-yellow ring that is bordered with pigment about the disc. Dr. Schöbl has met with eight cases of persistent hyaloid artery in 180,000 cases which he has seen and he gives some good illustrations of the appearances presented. He discusses the varieties of sarcoma and establishes the following forms; simple glioma, glioma retinæ luxurians, cryptoglioma, fibro-glioma, telangiectatic glioma, and finally describes a case in a child which he thinks was primarily a pure retinal glioma but which when it spread into the sclera produced proliferation with the formation of a glio-fibroma. When the glioma cells spread into the orbital tissue they started a proliferation in this locality; round and subsequently spindle cells were formed and thus a glio-fibro-sarcoma resulted. The same process was repeated with the unstriped muscular tissue of the blood-vessels and so at length in its final stages the tumour represented a glio-fibro-sarco-myoangioma which illustrates well the variety of forms which may be found in a single specimen. The whole of this article is very well written and very great pains have been taken by the author in collecting cases. The article on Diseases of the Optic Nerve is written by Dr. Johann Deyl, also a Professor of Ophthalmology in Prague. In describing hæmorrhage of the papilla the author of the article makes the important statement that in those cases of arterio-sclerosis in which rupture is imminent, or has already occurred either in the retina or on the disc, pressure on the globes with the finger no longer excites pulsation in the degenerated arteries, and he attributes this to the induration of the walls of the vessels. Speaking of intra-ocular neuritis he accepts Uhthoff's definition of that condition as a swelling of the optic disc which does not exceed three dioptres from the level of the retina, whilst when the height of the swelling exceeds this it is to be considered as a "choked disc." The former affection not infrequently passes into the latter and the various theories explanatory of the causes of the appearances presented in "choked disc" are well given, and Dr. Deyl supplies accurate information in regard to the course and relations of the arteria centralis retinæ. As might be expected from Mr. Priestley Smith the account of Glaucoma is an excellent monograph. Without being unduly extended all the principal points in the etiology, symptomatology, pathology, and treatment are given. He dwells upon the greater liability of small eyes to glaucoma and remarks that eyes in which the cornea measures only 10 millimetres in the horizontal diameter seem seldom to escape an attack.

We must not terminate this notice without a word of commendation of Dr. Robert Randolph's essay on Sympathetic Ophthalmia. He draws a very clear dividing line between sympathetic ophthalmia and sympathetic irritation and gives the results of numerous experiments which he himself has made to elucidate the etiology of this obscure affection. The editors, Dr. Norris and Dr. Oliver, are to be congratulated, alike on the judicious selection of authors which they have made as evidenced by the excellence of the several articles, upon the translations which have been made by Dr. Reed, Dr. Alt, and Dr. Sattler, and also upon the remarkable freedom from typographical errors. The illustrations are as a rule good and there is an excellent index.

*Kirkes' Handbook of Physiology.* Edited by W. D. HALLIBURTON, M.D. Lond., F.R.S., Professor of Physiology, King's College, London. Fifteenth edition, with upwards of 650 Illustrations, including some Coloured Plates. London: John Murray. 1899. Pp. 872. Price 14s.

ALTHOUGH three years have not elapsed since the publication of the fourteenth edition of this standard work a considerable number of minor alterations and additions have been made concurrently with the recent advances in physiology, whilst some paragraphs have been omitted. The principal changes are to be found in the description of the nervous system—the account of the central organs being relegated to the latter part of the book—in the description of the circulation and in the chapter dealing with development. In dealing with the subject of the circulation the method devised by G. N. Stewart of estimating the output of the heart has been introduced together with an account of the cardiometers of Barnard and of Roy and of the results of the experiments of Leonard Hill demonstrating the correctness of the Monroe-Kellie doctrine. This doctrine is to the effect that the quantity of the blood in the brain remains tolerably constant. Also details are given of Hill's experiments on the effect of gravity on the circulation as shown by suspending rats or rabbits by the ears and examining the condition of the vessels. The measurement of the blood-pressure in man is shown to be practicable and a woodcut is introduced of Hill and Barnard's sphygmometer. A paragraph is introduced on the crystallisation of proteids. Every chapter seems to have been brought up to date with equal care and the volume stands not only as the most recent but as one of the best works on physiology extant.

## LIBRARY TABLE.

*Transactions of the American Ophthalmological Society. Thirty-fourth Annual Meeting at New London, Conn., 1898.* Hartford: Published by the Society. 1898.—The thirty-fourth annual meeting of this society was held under the presidency of Dr. George C. Harlan. The first paper read before the meeting was by Dr. Lucien Howe in which the question proposed was—why is the proportion of blind in cities less than in the country? and the answer given was that less attention is paid in the country to the prophylaxis of purulent ophthalmia of new-born children than is the case in towns. To this article is appended a report on resolutions relating to purulent ophthalmia supporting the method of prevention of this disease adopted by Credé. Dr. Bull gave the details of a case of Gunshot Wound of the Eye and also read a paper on Some Unusual Tumours of the Orbit, Eyelids, and Vicinity, and various cases of tumour were reported by Dr. Friedenberg, Dr. F. M. Wilson, Dr. Gruening, and Dr. de Schweinitz. The Best Mode of Operating for Secondary Cataract was discussed by Dr. H. Knapp who laid down the cardinal rule that cutting was always preferable to tearing. Dr. Robert Sattler has practised with success Removal of the Lens in cases of High Myopia. He also contributes a good article on the Surgical Treatment of Keratoconus. Dr. Samuel Theobald, in a paper on the Treatment of Entropion, recommended the employment of caustic potash on the ground that the desired effect can be obtained more exactly with this agent than by other methods. Dr. Myles Standish reported several cases of Lymphoma of the Lids, Dr. Hansell a case of Interstitial Keratitis, and Dr. John Green and Dr. Arthur Ewing a case of Hypopyon Keratitis, with illustrations. The President, Dr. G. Harlan, communicated a series of cases of Delayed Union after Cataract Extraction. Dr. B. Fryer gave the results of using Protargol in the Antiseptic Preparation of the Conjunctiva prior to Cutting Operations of the Eyeball. Dr. Ward Holden gave an

account of the Pathology of Quinine Blindness Experimentally Induced, with illustrations. Dr. S. Risley recorded a successful case of Implantation of Sponge in the Orbit after Enucleation and also reported on the Action of Cassaripe, a new remedy for the treatment of corneal ulcers and other infectious diseases of the eye; it is derived from the cassava plant. Dr. G. Hay discussed the Position of the Eyeball during the Listing Rotation. Dr. T. V. Sutphen gave an account of Recovery from Sympathetic Inflammation consequent upon Adhesion of the Eyelid to the Stump. Dr. Adams gave the details of two cases of Premature Delivery induced to Preserve Sight. Dr. Wheelock Rider contributed an article of some originality on Unilateral Winking as a Test for Comparative Visual Activity. Dr. J. Worrall gave a case of Recovery from Sympathetic Neuro-retinitis induced by a stab of the eye with a knife. Dr. Minor reported an interesting case of a man learning to see at 40 years of age. Altogether it will be noted that the meeting was a successful one.

*An American Text-book of Gynæcology, Medical and Surgical, for Practitioners and Students.* By Various Authors. Edited by J. M. BALDY, M.D. With 341 Illustrations in text and 38 Coloured and Half-tone Plates. Second edition, revised. Philadelphia: W. B. Saunders. 1898. Price 34*s*.—During the four years that have passed since the appearance of the first edition of this book the subject of gynæcology has undergone considerable expansion, especially as regards the devising of new operations and of new methods of performing old operations. In accordance with this we find that the changes in the second edition are largely concerned with methods and details of operations. A number of new figures have been added and old ones cut out and amongst the latter we are glad to see that nearly all the figures of instruments, a particularly useless variety of illustration, have been eliminated. The majority of the new figures are good and clear, especially those illustrating abdominal hysterectomy and vaginal hysterectomy with the use of clamps. Pryor's operation of posterior vaginal section is fully described and illustrated and is strongly recommended for the surgical treatment of retro-displacements. Amongst other new or revised matter we notice a description of Freund's and Baldy's operations for the treatment of prolapse of the uterus. The section upon Diseases of the Bladder and Urethra has been practically re-written and the whole book bears evidence of careful revision. The authors are to be congratulated upon having kept the book practically of the same size as before in spite of the large amount of new material which they have added, so that it still merits its title of a text-book. The list of authors remains the same as in the first edition, and as we said then the book is a valuable one and will be especially useful to the student, insomuch as it contains a large amount of information upon special points in the technique of gynæcological operations which is not to be found in the ordinary text-book of gynæcology.

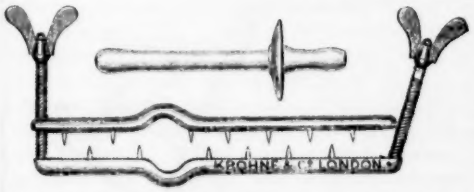
DEATH-RATE OF BATH RURAL DISTRICTS.—At the meeting of the Bath Rural District Council held on March 25th Mr. C. Harper, the medical officer of health, presented his report for 1898, which stated that the number of deaths in the 17 parishes, comprising an area of 27,266 acres with a population of 28,050, amounted to 376, giving a death-rate of 13·40 per 1000. During the year there were 807 births registered, giving a birth-rate of 28·7 per 1000.

THE GLOUCESTER GENERAL INFIRMARY AND GLOUCESTERSHIRE EYE INSTITUTION.—At the quarterly meeting of this institution held on March 30th, under the presidency of Colonel Curtis Hayward, the chairman stated that during the past 10 years the expenditure of the infirmary had increased by £1000 a year, while the income had only increased by £200.

# New Inventions.

## A COLOTOMY CLAMP.

IN 1889 Mr. Herbert W. Allingham introduced his clamp with parallel bars provided with spikes and closed by means of screws, which latter have been materially improved by Mr. W. Phayre Ryall. In order to allow flatus to be passed whilst the clamp was applied I have had made by Messrs. Krohne and Sesemann of Duke-street, W., a modification in which the parallel bars when screwed into apposition leave a circular hole situate at one-third from the end to cover the proximal end of the bowel. The hole is large enough to




admit the passing of a shortened gum elastic or bone enema pipe, such as is used in a Higginson's enema. The upper end of this tube may have an indiarubber tube attached so as to bring it outside all dressings. Mr. Ryall's screws with hinges at the ends of the bars were adopted. I applied this clamp on the third day in a case of right inguinal colotomy and found that it answered to my entire satisfaction.

F. A. PURCELL, M.D., M.Ch. R.U.I.

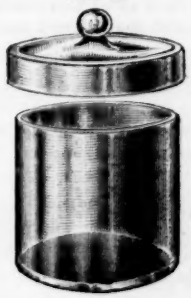
Manchester-square, W.

## A DROPPING BOTTLE AND A SPECIMEN JAR.

THE subject of Fig. 1 is an improved pattern of Chalk's dropping bottle, manufactured by Mr. A. H. Baird, 39, Lothian-street, Edinburgh. It will be seen that the dropping tube goes well to the bottom of the bottle and that in the bottom there is a depression in which any sediment may collect. The dropping tube has an indiarubber cap—

FIG. 1

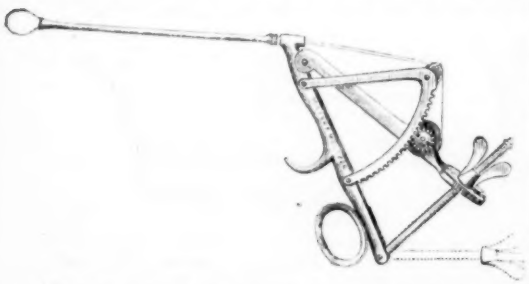
FIG. 2.



not a piece of sheet rubber tied over it. The price of these bottles is 10*d*. each or 9*s*. per dozen. Fig. 2 is a glass specimen jar with a loose glass lid. It is claimed for these lids that the vapour condensed on them drops back as fluid into the jar, so that the loss of fluid by evaporation is minimised. The stock sizes of these jars vary from 5 in. to 13 in. in height and from 3½ in. to 10½ in. in breadth. Mr. Baird also makes glass specimen jars with nickel-plated screw caps and stoppered specimen bottles of a squat form with extra wide necks, useful for holding catgut, dehydrating sections, cleaning cover-glasses, &c.

### A NASAL SNARE.

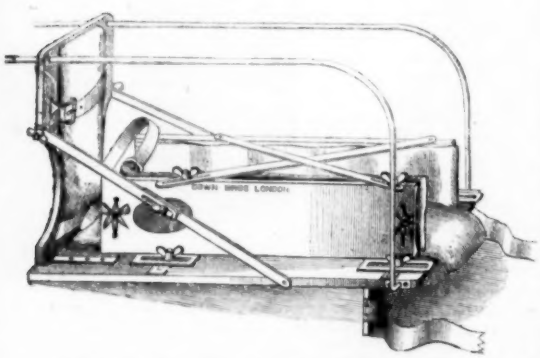
DR. ERNST R. BROWN of Montreal has designed a nasal snare which unites the qualities of simplicity of construction, lightness, and strength. As shown in the engraving the wire which forms the loop is led over a guide pulley and fastened to a wheel in connexion with the pinion seen beside the rack. The loop is tightened by making pressure with the thumb so that the force employed is exactly known, whereas in the patterns of snare worked by a spring and ratchet only an approximate estimate of the force can be obtained. The advantages of this quality in dealing with nasal polypi are obvious. The screw and fly nut enable the operator to proceed cautiously and also to stop the action at any stage.



Owing to the length of the rack a loop of considerable size may be employed and it can, moreover, be tightened up very quickly. The finger rest is a material assistance in the holding of the instrument. The barrel is of the ordinary shape and size; it is not made in one piece with the frame, but fits into a socket from which it can be pulled out when the strain on the wire is released by removing the thumb from the lever; the loop is then again made ready. This snare works without the clicking noise made by some of the other modifications of the instrument and all the parts being of metal are easily sterilised. The makers are Messrs. Mayer and Meltzer, Great Portland-street, London, W.

### A NEW FRACTURE APPARATUS.

THIS apparatus has been designed with a view to furnish every requisite for treating any fracture of the leg or foot in an easily portable form and at small cost. It has a back splint into which a foot-piece can be fitted, so as to suit the different lengths of limb at any desired



angle. Two side splints are attached to the back splint by travelling screws in such a manner as to admit of any required degree of approximation at either end and are therefore capable of accurate adjustment to the different diameters of the leg. The same arrangement permits of their being altered at will as swelling takes place or diminishes, or for the application of dressings, &c., without disturbance of the fracture. A rectangular rod passes from either side of the back splint to the top of the foot-piece, and forms a cradle. As the limb is exposed to view during the entire course of treatment any displacement can be at once rectified. The splint is manufactured by Messrs. Down Bros., 21, St. Thomas's-street, London, S.E.

F. ST. JOHN KEMM, L.R.C.P., L.R.C.S. Edin.
Worle, Weston-super-Mare.

## THE PREVENTION OF TUBERCULOSIS.

(Continued from p. 961.)

### LEEDS.

ON March 24th a conference was held at the Town Hall, Leeds, upon the Prevention of Tuberculosis, at which the Lord Mayor presided. The meeting was held in the Lord Mayor's private rooms. His lordship had invited to the conference the medical staffs and committees of management of the various medical charities in Leeds, the Corporation Sanitary Committee, the President and officers of the Leeds and West Riding Medico-Chirurgical Society, the committee of the Leeds Sanitary Aid Society, and the Holbeck Sanitary Association. The Lord Mayor in opening the proceedings referred to the importance of the subject for which they had been called together. Dr. J. E. Eddison, who opened the discussion, moved the following resolution:—

That a committee be formed to make inquiries as to the best way of establishing special wards or a special institution for the treatment of poor people suffering from tuberculosis, particularly phthisis.

This was carried unanimously and after the election of the committee and the passing of the usual votes of thanks the meeting terminated.

### CHESHIRE.

The Cheshire County Council recently undertook some experiments with herds at their dairy institute at Worleston to demonstrate the reliability of the tuberculin test in animals. Experiments were also undertaken at the agricultural school at Holmes Chapel. The number of cows in Cheshire is 195 per 1000 acres. The tests were conducted by Mr. Laithwood, the chief veterinary inspector for Cheshire, and the results were as follows: In the Worleston herd out of 54 animals 37 were healthy, 14 reacted, and three were classified as doubtful; in the Holmes Chapel herd of 17 animals 13 were healthy, three reacted, and one was doubtful. Nine of those which reacted were slaughtered and examined in the presence of competent witnesses. All the carcasses were tuberculous, tubercle being chiefly found in the glands, the lungs, and the livers. All the carcasses were, however, declared fit for food and were sold, being nine in all, for a total of £97 7*s*. The remaining animals which reacted have been isolated and experiments as to the curability of tuberculosis will be made.

### ST. HELENS.

The medical officer of health of this county borough, Dr. F. Drew Harris, has issued a report to the health committee on the prevention of tuberculosis, especially among children, and also on some means by which the excessive infant mortality may be controlled. He is of opinion that improper feeding is the great cause of the high infant mortality and he advocates sterilisation or Pasteurisation of milk. He describes the Goutte de Lait Society inaugurated at Fecamp by Dr. Dufour which supplies mothers unable to suckle their children with sterilised and humanised milk. A marked diminution in the mortality has been noticed since the society began its work only four years ago.

### BATH.

A deputation of medical men waited on the mayor of Bath on March 20th to ask him to call a public meeting to form a local branch of the National Association for the Prevention of Consumption and Other Forms of Tuberculosis. The deputation was introduced by Dr. Weatherly. Dr. Symons, the medical officer of health of the city, urged the establishment of public slaughter-houses. The mayor said that he certainly would summon a public meeting to discuss the questions put before him by the deputation.

# THE LANCET.

*LONDON: SATURDAY, APRIL 8, 1899.*

OUR readers will have seen in THE LANCET of April 1st, under the head of Parliamentary Intelligence, that the Lord Chancellor has introduced into the House of Lords a Bill entitled, "Companies (Medical Profession) Bill," the object of which is to prohibit the profession or business of physician, surgeon, dentist, or midwife being carried on by a company. The title and the Bill itself are a model of brevity. The whole consists of four paragraphs—title and clauses all included. The one essential clause runs as follows:

"It shall be unlawful for a company under the Companies Acts, 1862 to 1898, to carry on the profession or business of a physician, surgeon, dentist, or midwife, and if any company contravenes this enactment it shall be liable on summary conviction to a fine not exceeding £5 for every day during which the contravention happens."

There is much public feeling on the subject of limited liability companies and the sins which are committed under the legislation which was meant to regulate them and make them a public benefit. There is much difference of opinion, also, on the question as to how far the development of the principle of incorporation for commercial purposes has been an advantage. But on one point there does not seem room for any difference of opinion—viz., that the principle of incorporation was never meant to be used to legalise an action on the part of a member of a limited company which would be illegal and punishable if committed by the same individual in a private capacity. It is illegal, for example, for any individual not called to the bar or qualified as a solicitor to act as a barrister or as a solicitor. And so far as we are aware the most audacious exploiters of the principle of incorporation, or rather of its application to the practice of professions by individuals not possessed of the legal qualifications for such practice, have not attempted its application to the practice of the law. But an outrage not less scandalous has been committed by companies in assuming, in utter defiance of the Medical and Dentists Acts, the styles, titles, and functions of the medical profession, although no members of the profession were included in their membership. They have done so with impunity hitherto because the penal clauses of these Acts apply to "persons" not to a company. It would take up too much of our space to give particular instances, but such instances may be found in the volume of Minutes of the General Medical Council for 1898 in Appendix xiv., where the whole action of the General Medical Council and of other bodies on this subject in recent years is described.

To ordinary intellects it will not appear very clear why the law which requires qualification in barristers and solicitors is so much more difficult to defy than that which requires qualification in medical men. But the courts have given decisions which enable any group of illiterate and uneducated persons to carry on the business of medical men or dentists without the personal qualification which in individuals is supposed to be essential. The evil and the absurdity have long occupied the attention of various bodies, including the British Medical Association, the British Dental Association, the Medical Defence and Protection societies, the Royal College of Veterinary Surgeons, and the Pharmaceutical Society of Great Britain. The profession is specially indebted to the Companies Acts Amendment Bill Committee of the General Medical Council, consisting of Sir WILLIAM TURNER, Mr. HORSLEY, Mr. TOMES, and Mr. TICHBORNE, who very particularly brought to the notice of the Council the action of a drug company in Cork registered under the Companies Acts which had intimated that "one of its objects was to carry on the business of physicians and surgeons." Among the signatories of the memorandum of this association there was no qualified medical man and not even a qualified pharmaceutical chemist. The grievance thus displayed was practically admitted by a Departmental Committee of the Board of Trade which, under the presidency of Lord DAVEY, had the matter under its consideration. There was, in fact, no possibility of denying the absurdity of a state of the law which enabled persons who might have been fined for practising medicine or dentistry in their individual capacity to call together their friends and relatives, equally unqualified with themselves, and form a company under whose name the business of giving medical and surgical advice and assistance and medicines could be carried on with impunity. Fortunately the Lord Chancellor and several other law lords have taken much personal trouble to amend this absurd and discreditable state of the law.

The present Bill is the outcome of this trouble. Opinion will be divided as to the form and probable efficiency of the remedy. Attempts have been made previously to embody clauses in Companies Bills or in Pharmacy Bills which would have met this acknowledged evil. The opinion has been strongly held by some that as the mischief has been done by an abuse of the Companies Acts and a misapplication of the principle of incorporation any remedying clause should be embodied in an amending Companies Act. Theoretically this would seem desirable, but many difficulties would have to be overcome before such a Bill would pass, or before an effective clause could be put into a Medical or a Pharmacy Bill dealing with such totally different matters. We are therefore grateful for a special Bill correcting directly the defects of the Companies Acts so far as the practice of medicine, surgery, dentistry, and midwifery is concerned. The essential clause of the Bill enacts such an obvious principle that any effective opposition to it is scarcely imaginable. We would suggest the addition of the words, "or any member of a company in its name" after the words "the company" in the first line of the above clause. Possibly they are superfluous, but we are dealing with a class of persons who singularly combine stupidity with audacity, and we venture to think that this addition would tend to make them more cautious in attempting to evade the law than they would be under the present form of the clause. As laymen, too, with

sad experience of the evasibility of Acts of Parliament, we venture to ask for the insertion in the above clause after the figures "1898" of words to this effect: "All other Acts notwithstanding." We know how completely baffled the General Medical Council has been in getting into its hands fines inflicted in the metropolitan area under the Medical Acts by reason of the competition of the Metropolitan Police Acts.

THE question of public abattoirs has often been raised in these columns. We deputed a Special Commissioner to visit and describe the municipal abattoirs of Brussels about seven years ago and also the model abattoir of Anderlicht in the outskirts of Brussels. Subsequently he inspected the magnificent and gigantic abattoirs of Berlin and the bacteriological laboratories attached thereto.[1] We are pleased to note that the principles which should govern such institutions and which we then set forth have been recently advocated by Dr. WILLIAM ARTHUR BOND at the Sanitary Institute. He urges, as we have frequently urged, that when a public abattoir has been established the local authorities should have the power to prohibit slaughter in any other place. It is obvious that the object of a public slaughter-house is to do away with private slaughter-houses. Further, he proposes not only that all meat should be inspected by properly qualified inspectors, but that all the joints should be stamped and bear marks of inspection similar to post-marks on letters, so that the public may be able to verify for themselves that the meat has been examined. This practice largely prevails on the Continent and what is practicable abroad should be equally easy in England. Dr. BOND points out that with regard to tuberculosis the contamination is more commonly on the surface of the meat and is due to material derived from other parts of the animal rather than to disease of the meat itself. If these diseased parts are promptly removed and destroyed and do not touch the actual meat substance of the carcass the danger is reduced to a minimum. But such precautions cannot be taken in dark, small, overcrowded private slaughter-houses. We are told that, according to the records of various English and Continental abattoirs, from 40 to 50 per cent. of the cows slaughtered are suffering from tuberculosis, and at Copenhagen the proportion of the swine suffering from this disease was equal to 15·3 per cent. during the three years 1890–93. The disease is but little prevalent among sheep and calves. Inspection, which in the face of these startling figures becomes a matter of urgent necessity, can only be effective when the organs of the animal can be adequately viewed in a good light and when kept separate from the offal of any other animals. Such conditions do not prevail in private slaughter-houses. In them, on the contrary, the offal of several animals is thrown into a heap and in ill-lighted places.

It is often stated that the establishment of public slaughter-houses in London would be opposed to the interests of the butchers. This Dr. BOND assures us is not the case, for though there are in London some 5000 butchers only 450 of these have private slaughter-houses. The cost of properly inspecting these 450 private slaughter-houses, scattered in all directions, would be much greater than if all the slaughtering was done in six or eight local centres. Mr. A. E. HARRIS, the medical officer of health of Islington, ably summarises the advantages to be attained. He points out that private slaughter-houses are a nuisance to the neighbours, that they greatly increase the foulness of sewers in residential districts, and that meat hanging in these badly constructed private slaughter-houses is specially likely to be contaminated by foul emanations. Financially, the fact that meat is better preserved in model public abattoirs is a great advantage to the trade and to the public. Here also much of the blood and offal which are now lost can be saved and utilised. Then there are the dangers to the public resulting from driving the cattle through the streets and the loss of time and the expense which are thus entailed. Of course, public slaughter-houses would be placed close to railway lines and water communications. It has also been shown that public abattoirs, when properly managed, yield a good profit and that such institutions help in reducing the rates. From the humanitarian point of view much of the cruelty which is perpetrated in private slaughter-houses and which is not seen and cannot be checked could never take place in the public slaughter-house where inspectors are always present. There is also much unnecessary suffering entailed in the driving of exhausted animals through the streets and the lairage in private slaughter-houses is frequently unwholesome and insufficient.

Dr. BOND relates that at the Holborn abattoir when the inspector first entered upon his duties he seized 4000 tons of diseased meat in three months, exclusive of diseased offal. A large number of offenders were fined or imprisoned; and yet for several years previously not a single conviction had been obtained. This proves that the public must have consumed a large quantity of diseased meat. It is thought that in London there should be at least six public abattoirs. In Glasgow there are three, but in Manchester there is only one. In both these towns the system has proved a financial success. On the Continent the charge made is much higher than in England. In Glasgow the charge for cattle is 9*d*. per head, it is 1*s*. 6*d*. in Manchester and Liverpool, and 1*s*. in Leeds; but in Germany the charge varies from 2*s*. to 5*s*. Of course, as we have pointed out when describing Continental slaughter-houses, these institutions should be near the cattle market and in direct connexion with the main railway lines. There must be large cooling rooms, a microscopical and pathological laboratory, and proper but separate accommodation for fat-melting, bone-boiling, gut-scraping, and the extraction of the albumin from the blood. Then there should be a small and separate slaughter-house for the killing of diseased cattle and a destructor for diseased carcasses, such as exists at Hamburg.[2]

It is difficult to see why London should have waited so long for a reform which was carried out in Brussels in the year 1836. Why should London be 63 years behind Brussels? Not only is London behind the Continent, but many of the British provincial towns are also in advance of the metropolis. Is it in the power of the 450 butchers who now possess the monopoly of slaughter-houses to thus compromise the

[1] THE LANCET, Dec. 17th, 1892, and July 14th, 1894.

[2] THE LANCET, July 21st, 1894.

health and injure the interests of some 5,000,000 people? Besides, experience shows that even the butchers themselves would benefit by the establishment of public slaughter-houses. We dealt with this point in a leading article in our issue of March 25th and Dr. BOND tells us that in Glasgow, where private slaughter-houses have been abolished, the butchers now express a strong opinion that the public slaughter-houses are preferable to the old system. What, then, remains in the way of this much-needed reform? Nothing beyond the ignorance and apathy of the people. The Sanitary Institute will accomplish a good work if it can stir the population of London to take action in this matter.

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IN the April number of the *Practitioner* are printed the opinions of a symposium of experts upon the subject of cancer. That this is a matter possessing a very real and definite interest for everyone of us there can be no doubt. The pathology—or rather the etiology—of the disease is at present an inexplicable problem to medical men, while its universality, its malignity, and its insidious course render it an object of dread both to those who are unfortunately attacked by it and to those whose duty it may be to try to treat it successfully. Many of the subjects discussed have already been dealt with by the same writers in the columns of THE LANCET, so that our readers will be already cognisant of some of the facts here presented. The great question as to whether cancer is really increasing is dealt with by Dr. A. NEWSHOLME as regards the United Kingdom. Dr. ROSWELL PARK contributes a paper in which are considered firstly the increasing mortality from cancer in the State of New York, secondly the arguments pointing in favour of the parasitic origin of the disease, and thirdly the work on the matter already done and in prospect in the New York State Laboratory. Mr. ALFRED HAVILAND writes on the Medical Geography of England and Wales and Mr. D'ARCY POWER on the Local Distribution of Cancer and Cancer Houses. Mr. H. G. PLIMMER discusses the Etiology and Histology of Cancer; his paper is well illustrated and gives a very full account of his researches.[1] Professor J. MCFADYEAN discusses the Occurrence of Cancer in the Lower Animals and Mr. WATSON CHEYNE opens the practical part of the symposium by answering the question, "What can surgery do to relieve sufferers from cancer in various parts of the body?" The last paper is by Dr. W. B. COLEY, the introducer to the profession of Coley's Fluid, and is on the Treatment of Inoperable Cancer. Finally, the "medico-literary causerie" lays before us interesting information as to those scandalous deceivers, the self-styled cancer-curers.

The study of cancer is not one calculated to inspire cheerfulness, so perhaps it is as well that Dr. NEWSHOLME, whose article is the first of the series, considers that the conclusion that a real increase in the mortality from cancer has occurred during recent years is not justified by statistics. "They rather tend to the conclusion that the increase in cancer is only apparent and is due to improved diagnosis and more careful certification of the causes of death, especially to the latter. It is obvious, however, that this conclusion is only one of probability."

Dr. ROSWELL PARK'S and Mr. PLIMMER'S papers appear to show conclusively that in and among cancer cells there are appearances which do not belong to the cells themselves but are something foreign to their proper structure and development, and Mr. PLIMMER claims to have isolated such bodies, to have cultivated them outside the body, and by injecting such cultures into animals to have caused their death together with the production of tumours, so far of endothelial origin with the one exception of the cornea. From these tumours pure cultures, he states, can be made which if inoculated will produce like growths. In connexion with these discoveries it is interesting to note that the researches of Mr. ALFRED HAVILAND and Mr. D'ARCY POWER upon the Geographical Distribution of Cancer and upon Cancer Houses respectively all go to show that cancer is an infective disease, that locality is a predominant factor, and that possibly cancer may be propagated from some intermediate host, as is malaria; and as malaria or some similar disease attacks the lower animals so do malignant growths. Although not many years ago such an idea was scouted, yet Professor MCFADYEAN has collected 63 cases of cancer in the domestic animals. Notwithstanding that it is so common among human beings cancer of the tongue, uterus, or mammary gland is exceedingly rare among the lower animals. Mr. WATSON CHEYNE gives very hopeful results obtained by early and extensive operation. To take operations for cancer of the breast, he knows of 11 patients now alive with no sign of recurrence at periods of from six to nine and a half years after operation, forming about 50 per cent. of the cases operated upon in the period under review.[2] With regard to inoperable cancer Dr. COLEY considers that his mixed toxin treatment offers the best chance of relief. He allows that the effect is far more marked in the sarcomata and varies considerably in them, being least marked in the most malignant form—namely, the melanotic.

Our contemporary has produced a useful summary of our present knowledge and ideas upon the subject of cancer. Shall we ever be able to cure it with certainty or, still better, to prevent it? It is conceivable that cancer may be found to depend upon some parasite the life history of which can be studied, as in the possibly analogous case of malaria, and some connexion may be found between such parasites and the low-lying river valleys with clay soils in which cancer, as observed by Mr. HAVILAND and Mr. POWER, mostly flourishes. Such a line of investigation appears to offer the best hope of future success. In the meantime we have to rely on the knife and above all on early diagnosis and wide removal. Another point to which every worker in this field should attend is that of hope. Rightly enough is despair condemned by theologians as one of the special assaults of the Evil One. As the "medico-literary causerie" reminds us both ROBERT BOYLE in 1664 and Sir JAMES PAGET have laid stress upon the necessity of never giving up the struggle with disease while life remains. We may, and do as a fact, know little about cancer; its treatment is even now far from satisfactory, and the road that leads to death from it but very little less dreadful both to the patient and his friends than ever it was. But the attitude of hopelessness is by all

[1] THE LANCET, March 25th, 1899, p. 826.

[2] THE LANCET, Feb. 15th, Feb. 22nd, and March 14th, 1896.

means to be avoided. We may be, it is true, groping feebly along a very dark pathway, but there are, we think, indications of the light to come already visible.

THE Bill for the reform and re-arrangement of Local Government areas in London, now under the consideration of Parliament, gives additional interest to the Registrar-General's annual summary which deals with the vital and mortality statistics of London and of other large towns in England and Wales during 1898. The statistics for London, while comparing favourably with those for the larger provincial towns and with those for most of the Continental cities, afford abundant evidence, if closely analysed, that the sanitary condition of some of the more crowded portions of our large metropolis leaves much to be desired and to be expected from more energetic local government. The recorded death-rate in the whole of London last year was 18·7 per 1000, which was one per 1000 below the average rate in the preceding 10 years 1888–97, during which the rate ranged from 21·5 in 1891 to 17·8 in 1894. After correction for differences of age and sex constitution, the same population which gave 1000 deaths in England and Wales in 1898 gave 1133 deaths in London. Among the 33 towns dealt with in the Registrar-General's annual summary the comparative mortality figure in 1898 was below 1000 in Croydon, Cardiff, West Ham, Portsmouth, and Brighton, ranging from 824 in Croydon to 973 in Brighton; in each of these five towns the rate of mortality last year was, after correction for age and sex differences, below the mean rate of the whole of England and Wales. In five of these 33 towns this comparative mortality figure exceeded 1300; it was 1327 in Newcastle, 1351 in Sunderland, 1411 in Manchester, 1452 in Salford, and 1498 in Liverpool. These figures show that among the 33 towns last year in equal numbers living, equally constituted as to age and sex, 150 deaths occurred in Liverpool and only 82 in Croydon. This startling contrast between the social and sanitary condition of these two urban populations is a matter of most serious import, and the mortality statistics for the different districts within the metropolitan area show contrasts equally startling. Registration or Inner London is at present divided into 43 separate sanitary areas. After the distribution of the deaths recorded in public institutions to the localities from which the inmates were admitted, the death-rates last year in the various sanitary areas ranged from 11·7 per 1000 in Hampstead, 13·2 in St. George Hanover-square, and 13·7 in Fulham, to 23·8 in Limehouse, 24·4 in St. George-the-Martyr Southwark, 24·8 in St. George-in-the-East, 24·9 in Holborn, and 25·7 in St. Luke. It should not be overlooked that the rates in Hampstead, St. George Hanover-square, and Fulham are understated through the abnormal proportion of domestic servants included in those populations; but after due allowance for this disturbing factor these widely divergent rates undoubtedly indicate a disastrous loss of health and life in many of the more crowded central districts of London. If the health condition of these sanitary areas be tested by the proportions of infant mortality measured by the number of deaths under one year of age to 1000 births, very similar conclusions must be accepted. This proportion of infant mortality, which was 108 in Stoke Newington, 120 in St. George Hanover-square, and 125 in Hampstead, rose in the other sanitary areas to 208 in Limehouse, 211 in St. Saviour Southwark, and 221 in Holborn. Thus the infant born in Holborn has less than half the chance of living through its first year of life than has the infant born in Stoke Newington. This waste of infant life has undoubtedly close relation to overcrowding in more or less insanitary tenements and can only be reduced by strict and constant enforcement of the provisions of the Public Health Acts by medical officers of health and by efficient sanitary inspectors. The apathy of many of the present London sanitary authorities in health matters is proverbial and we confidently look forward to the new Local Government Bill for London as a means of initiating a marked acceleration and increase of interest in sanitary progress within the county of London.

# Annotations.

"Ne quid nimis."

## FRIENDLY SOCIETIES AND THE MEDICAL PROFESSION.

ON April 3rd the twentieth annual conference of the Friendly Societies Medical Alliance was held in the Assembly Rooms at Leamington. Alderman T. S. Harvey of Leamington presided and in his inaugural address is reported (we quote from the *Times*) as saying that it was a matter for regret that in certain towns there still existed hostility to the objects and aims of friendly societies medical associations on the part of the medical profession. Meetings had been held between representatives of the General Medical Council and the leading friendly societies of the country with a view to bringing about mutual settlements of disputes. They must be careful to limit their attendance to *bonâ fide* members of friendly societies, for medical men had every right to object to their medical associations going about touting for patients outside the ranks of friendly societies. But the medical profession would have to concede the right—not the privilege but the right—of the principal friendly societies to make combined provision for all their members altogether apart from their social position. They would strenuously resist any claim put forward by the medical profession to impose any wage limit to membership. If these are the views of the medical associations in general we cannot congratulate them on their wisdom. It is all a part of the modern craze for cheapness which is ruining everything. Just as goods made by sweaters, whether clothing, furniture, or anything else, are shoddy and rotten, so sweated medical attendance will naturally be careless and inferior. Good workmen nowadays, whether they work with their heads or with their hands, must be paid well if they are to be kept and sensible employers are finding this out. The friendly societies will have to learn this lesson and the Battle of the Clubs is by no means over yet. Respectable and conscientious medical men are getting more and more unwilling to attend friendly societies and this state of matters will continue until some steps are taken to limit the membership of such societies to those who are really needy.

## THE SALE OF HOSPITAL CASE BOOKS.

A STATEMENT appears in *Truth* of March 30th which if correct reflects very gravely upon the management of the Hospital for Women, Soho-square. It is to the effect that

quite recently there were sold at Messrs. Puttick and Simpson's a lot of old books comprising "*inter alia* 21 old manuscript volumes of cases treated at the Women's Hospital, Soho-square, by the late Dr. Alfred Meadows. These books contained, as a matter of course, detailed reports of all the ailments and troubles of the innumerable women treated by the doctor during a period dating back to 1873." The whole lot only fetched 3*s.* 6*d.*, so that the hospital might easily have bought it, but the hospital authorities are stated to have ridiculed the idea that there was anything improper in the sale of such works by public auction. The Rev. A. W. Oxford informs us that it is the custom of the hospital to present the physicians with all their "letters" bound up at the end of every year. If the hospital really does this we consider it an improper thing to do. Records of hospital cases are not the property of the medical man in charge of such cases but of the charity of which he is an officer. The authorities of the hospital may not have known that Dr. Meadows's case books were to be sold, but his executors or whoever sold the books should never have had it in their power to do so. Records of cases, unless published so as to be unidentifiable or published with the consent of the patient, should certainly be considered absolutely confidential. We hope that the authorities of the hospital in question will see that such a gross breach of the trust committed to them does not occur again.

## SANITARY STAGNATION IN RURAL DISTRICTS.

NOTWITHSTANDING Public Health Acts and Local Government Acts establishing county, district, and parish councils there has been up to the present no great awakening in the sense of sanitary reform in many of our rural districts. Conditions which obtained when the Public Health Act, 1875, was passed persist at times even to-day, and there would appear to be but little prospect, immediate or remote, of a better state of affairs. In a word, there are numerous instances throughout the country where both central and local government have signally failed. As a case in point we may perhaps take the Easingwold Rural District, the annual report concerning which has recently reached us. This district is situated in the North Riding of Yorkshire and has a population of some 10,500. In 1890 the late Dr. Barry of the Local Government Board inspected the district and a printed report was subsequently issued by the Board. At that time the sanitary condition of the district was at a very low ebb indeed: houses unfit for habitation, water from shallow wells liable to pollution, rubble drains of the rudest character, excrement disposal by means of defective privy-middens, no isolation hospital, and no disinfecting apparatus. Sanitary administration was practically at a standstill and such action as was taken was of a makeshift and apologetic nature. Year by year the medical officer of health, Mr. E. B. Hicks, who is still in office, has brought up the sanitary shortcomings of his district in his annual report and year by year his advice has gone unheeded. It seems, indeed, that save for the water-supply and drainage of the most populous village—that of Easingwold itself—and two other villages, next to nothing has been done, the state of the district being little different from that in which it was when Dr. Barry made his recommendations with regard to it, and this in spite of the fact that in 1891 a committee of the sanitary authority inspected certain places in the district and endorsed the recommendations of the medical officer of health. It is somewhat difficult to determine the share which the several bodies responsible may be held to have in this astounding apathy as regards sanitary reform which pervades so many rural district councils at the present day. The North Riding County Council does not appear in this instance at least to have brought an overwhelming amount of pressure to bear upon the Easingwold District Council, nor have the efforts of the Local Government Board, whatever they may have been, led to any very evident result. Obviously not too much is to be expected from the officers of local authorities who receive a pay in no sense commensurate with their services; but the disease seems more deeply rooted than this, and it lies rather in the apathy of the members of rural district councils and in their disinclination to do anything which costs money. But this disinclination to action is apparently common to county, district, and parish councils alike in cases where rural districts are concerned, and furthermore it is obviously shared by the Local Government Board itself. Clearly, in these days of local government, the central health authority might find it inconvenient to put too great a pressure upon rural district councils, and indeed it would be difficult to find in either political party a President of the Local Government Board who would be allowed by his colleagues in the Cabinet to take any very drastic measures with respect to rural districts many of which are becoming rapidly reduced in population. But we should withal be glad to see more attention paid to rural districts than has been the case hitherto and vigorous action taken in regard to certain of the more apathetic councils. The sanitation of rural districts is not a matter which can be considered without regard to the relations which the defective sanitation of such districts may bear to urban communities. This fact will probably become more apparent in the near future now that the question of tuberculosis is attracting so much attention. The dweller in towns will soon wish to know more of the sanitary condition of the rural cowsheds from which much of his milk is derived, and of the methods adopted for recognising and controlling infective disease in localities where annually he may seek with his family to recruit his health. But so long as the Local Government Board have practically no control over the salaries of officers no part of whose remuneration is defrayed out of the county funds, so long will insufficient salaries be offered and, alas, accepted, and so long will the medical officer of health be at the mercy of those who care but little for sanitary reform. When adequate salaries are paid and permanence of office is assured we may look for a better state of things, but a more radical change than this is necessary if our rural district councils are to awaken to a proper sense of their responsibilities.

## SORE-THROATS AND ISOLATION.

THE position of diphtheria when recognised as such is now clearly defined and allowed for in the general scheme of medical treatment. Something still remains to be done, however, in similarly defining the place of a multitude of sore-throats uncertain in their source and developments but evidently infectious nevertheless. M. du Mesnil de Rochemont, whose paper is quoted in the *Journal de Clinique et de Thérapeutique Infantiles* of March 16th, has usefully directed attention to the wisdom of isolating for a sufficient period cases of this doubtful character. In support of his argument he refers to the well-known fact that in examples of throat disease clinically indistinguishable from true diphtheria careful examination has failed sometimes to detect the Löffler bacillus. Nevertheless, very grave consequences, local and general, have attended their progress which has even attained an epidemic prevalence. The writer states that he has himself observed such a generalisation of sore-throat in hospital practice, 18 out of 67 children being attacked. He quotes the similar experience of Cardeur, Basquet, and others. In his opinion, which is founded on an examination of 60 cases, this infectiveness is more than apparent and is associated with

the presence of the staphylococcus or the streptococcus, one or other of which is commonly found on the fauces. The conclusion he arrives at is that isolation should form part of the routine treatment of inflamed sore-throat. These observations, it is true, are not entirely new, nor indeed is the conclusion which is founded upon them. It has long been one of the axioms of careful practice, at least as regards tonsillitis, that this disease ought to be isolated until its true relation to diphtheria or scarlet fever is made out. We are probably right in regarding the isolation of cases of sore-throat not related to either of these diseases as a matter of somewhat less importance. At the same time it cannot be denied that many such are attributable to the activity of morbid germs and are therefore possessed of a greater or less infective power. There is much to be said therefore for the view that cases of inflamed throat which are not accounted for by mere atmospheric changes should be treated in seclusion.

## THE DIFFICULTY OF LOCALISING PULMONARY LESIONS.

AT the meeting of the Société Médicale des Hôpitaux on Jan. 27th M. Tuffier read a paper on this very important subject. At the Moscow meeting of the International Medical Congress he analysed all the accessible cases (306) of pulmonary surgery. This prolonged study impressed one thing on him: that difficulties lay much more in insufficiency of diagnosis and in defective localisation than in operative technique. 17 cases of pneumotomy which he performed confirmed this opinion. To attack a pulmonary disease efficaciously its position and extent as well as its unity or multiplicity should be known. Of 221 cases diagnosis was incomplete in 45; in his own 17 cases an error was committed in seven although the patients had been examined by one or several of his most distinguished colleagues. If an error of diagnosis was of minor importance in abdominal it was of capital importance in pulmonary surgery. Hepatic abscess could be distinguished from purulent pleurisy only with difficulty. M. Tuffier had operated on a case of non-suppurating hydatid cyst supposed by a great number of his colleagues to be situated in the liver but which he found to be entirely in the lower lobe of the right lung. It was necessary that the height and depth of a pulmonary lesion should be defined. In a case of hydatids the stethoscopic signs were supposed certainly to show the presence of a lesion in the upper two-thirds of the lung, but the cyst, as large as the fœtal head and packed with living echinococci, filled the lower lobe alone. Radiography revealed no opacity in this position. In a case of gangrene the centre of the lesion was localised in the eighth intercostal space; the inferior extremity was found in the seventh. This error though small had entailed dangerous explorations. The depth of the lesion was still more difficult to define. M. Tuffier had operated on two patients in whom auscultation revealed cavities so superficial that pyo-pneumothorax was diagnosed without reserve. He had to penetrate more than a finger's breadth of lung to reach a pulmonary cavity. The mistake appeared to have been inevitable; the lung was indurated, lardaceous, and adherent to the chest wall. Such errors were not peculiar to his countrymen. In foreign literature he had collected 10 examples in the case of pulmonary gangrene alone. In THE LANCET of Jan. 13th, 1894 (p. 87), Priestley Leech had recorded a case where multiple punctures failed to discover an abscess complicated by gangrene. Quincke[1] opened one cavity but the necropsy showed several. The extent of the cavity was still more difficult to determine—a small cavity might simulate an enormous one. The diagnosis was especially difficult in bronchiectasis, where a series of small suppurating excavations would cause the same symptoms as would be caused by a large cavity. In one case the diagnosis was septicæmia consecutive to a vast superficial pulmonary excavation at the anterior part of the lower left lobe. The incision showed several small cavities of the size of a walnut. If auscultation was powerless, so equally was puncture. The form of expectoration might lose its significance, especially in children in whom the thorax was supple and all the bronchi could be emptied by a single effort thus simulating the evacuation of a single cavity. The number of foci was of capital importance but nothing was more difficult to ascertain. A man had abundant fœtid expectoration. A focus of the size of the fist was opened by pneumotomy. The presence of a second focus was diagnosed as blood did not escape by the mouth whilst it escaped abundantly from the wound. Progress was made for a time but the septic symptoms reappeared. Though assured of the existence of a second focus search was in vain. The patient died and a second cavity was found a little over an inch above the first in the midst of sclerosed tissue. Most errors had been made in reference to lesions of the inferior pulmonary lobe; they were much rarer at the apex. M. Tuffier did not mean to attack medical diagnosis; on the contrary he found that it was usually exact and that error was exceptional. Radiography would no doubt prove of great value in the problem of localisation.

[1] Mittellungen aus den Grenzgebieten der Medicin und Chirurgie, 1895, vol. i., p. 15, obs. vi.

## THE INTERNATIONAL CONFERENCE UPON SYPHILIS.

AN International Conference upon the subject of the Prophylaxis of Syphilis and Venereal Diseases will be held in Brussels in September next. The secretary, Dr. Dubois-Havenith, has sent us a letter in which he expresses the opinion that medical men practising in the British Empire could render a great service to the conference by sending in a detailed report of the results of the absolutely free traffic in venereal disease which obtains throughout the United Kingdom and most of the rest of the empire. A very complete programme of subjects for discussion has been drawn up and a set of questions printed on a regular form which, if carefully filled up, should afford good grounds for coming to a definite conclusion on the subject in hand. Dr. Dubois-Havenith's address is 19, rue de Gouvernement Provisoire, Brussels.

## THE COUNTESS OF DUFFERIN'S FUND.

THE fourteenth annual report of the National Association for Supplying Female Medical Aid to the Women of India shows that the year 1898 has been marked by good progress in carrying out the objects of the association. During the past five years the Countess of Elgin has presided over the fund and an encouraging advance has been made in every direction; many new hospitals have been erected, the number of patients treated, including *purdah nashin* women, has steadily increased, and every possible facility has been offered to female students who wish to adopt a medical career. The total number of patients treated in zenana hospitals, wards, and dispensaries throughout the country was 1,484,967, of whom 30,598 were in-patients, 1,419,145 were out-patients, and 35,224 were visited at home. The staff employed in the various hospitals for women throughout India include 35 lady medical practitioners of the first grade—i.e., persons qualified for registration in the United Kingdom—75 assistant surgeons or practitioners of the second grade who have been trained in India and who hold Indian appointments, and 257 hospital assistants or practitioners of the third grade

which includes all qualifications not considered up to the standard required for assistant surgeons. The scheme of aiding ladies of the assistant surgeon class to obtain the higher qualifications in medicine has been found to work satisfactorily. The students at present in the principal medical colleges and schools in India comprise 83 European and native ladies training as assistant surgeons, 116 as hospital assistants, and 125 in the midwifery, nursing and compounding classes. Lady Elgin has every confidence that the association will continue to prosper under Lady Curzon's guidance. Surgeon-General J. Cleghorn who joined the committee of the association in 1892 has recently retired from India and his place has been taken by Surgeon-General R. Harvey, his successor as Director-General of the Indian Medical Service.

## VOLUNTARY LATERAL NYSTAGMUS.

IN the *Journal of the American Medical Association* of March 4th, 1899, Dr. William E. Gamble has published the case of a medical student, aged 24 years, who possessed this very rare power. He had had no severe illness since childhood and had not had scarlet fever or diphtheria. Whilst attending school at the age of 15 years he discovered that he could produce at will lateral nystagmus; it was never involuntary. He had no difficulty in beginning, but he could maintain the movement only for less than a minute owing to exhaustion. He could not produce it in one eye alone. The vision in each eye equalled $\frac{2}{3}\frac{0}{0}$. Dr. Noyes in his "Diseases of the Eye" says that he has seen but one case of voluntary nystagmus; the patient acquired the movement after having been confined to his room for some weeks with eye trouble.

## REPORT OF THE HEAD CONSTABLE OF LIVERPOOL FOR 1898.

THE number of apprehensions for drunkenness in Liverpool during the year 1898 was 4292, including 1361 females. In the year 1888, or 10 years ago, there were 15,628 arrests for a similar offence, which shows a remarkable improvement in the morals of Liverpool. There were 353 prosecutions of parents or guardians for wilfully neglecting, ill-treating, or exposing children, resulting in 229 convictions with various terms of imprisonment. The number of constables, &c., holding certificates from the St. John Ambulance Association was 1396. The number of cases in which first aid was rendered by the police was as follows: artificial respiration, 13; applying tourniquets, 26; applying splints, 195; applying bandages, 342; and administering emetics, 21. Other first-aid, 97. The police also rendered assistance other than first-aid to 3608 persons in cases of accident or sudden illness by removing them to hospital, &c., making a total of 4302 persons assisted, 39 rescues from fire or drowning being included in this number. Instruction classes in connexion with the Life-Saving Society have been recently formed and as a result of the first examination 54 constables, &c., have received certificates from the society. The new police horse ambulance system came into operation on April 25th last and there are now six fully-equipped ambulances stationed as follows: Royal Infirmary, Royal Southern Hospital, Northern Hospital, Stanley Hospital, Central Fire Station (for night service), and Old Swan Police-station (for outlying districts). The number of turns-out from April 25th to Dec. 31st was 1173. The number of persons committed for trial at the assizes was: for murder (of persons aged above one year), two males and one female; manslaughter, five males and one female; wounding and other acts endangering life (felony), 38 males and two females; malicious wounds and other like offences (misdemeanours), 20 males and seven females; rape, one; indecent assaults on females, one; unnatural offences, two; indecency with males, one male; defilement of girls under thirteen years of age (Criminal Law Amendment Act, 1885, Section 4), three males; defilement of girls under sixteen years of age (Criminal Law Amendment Act, 1885, Section 5), three males; concealment of birth, one female. 117 persons were bitten by dogs; 381 persons were run over by carts; and there were 165 attempts to commit suicide.

## TYPHUS FEVER.

THE report by Dr. Waldo on Typhus Fever in London which we print this week presents several features of interest. The ravages which were inflicted by typhus fever in bygone years can hardly be appreciated at the present time and the disease affords an excellent example of the effect of modern sanitation on what is literally a filth disease. It is, however, very infectious, although close contact with the afflicted person is essential as the poison becomes concentrated around the sick. Hence it is that medical men and nurses are so frequently attacked. This point is well brought out in Dr. Waldo's report, one man being responsible for the spread of the malady. It will be seen that he refused to enter the "reception house" with the rest of the family; had he done so the centre of original infection would have been entirely stamped out. This affords a useful lesson to the advocates of the prevention of small-pox by isolation rather than by vaccination. Such a proposition is all very well in theory but presents enormous difficulties in practice, as has frequently been pointed out, one of the chief being the question as to how to ensure the quarantine of those persons known to have been exposed to infection. The "liberty of the subject" is so ingrained in Englishmen that it would prove a hard matter to induce anyone to enter and remain in a "reception house" against his will. The evils of non-compliance with such a request are well shown in Dr. Waldo's report and might have led to far more serious consequences than were actually experienced.

## LOCK HOSPITALS AND LOCK WARDS.

IN a letter published in THE LANCET of April 1st Mr. F. W. Lowndes drew attention to the fact that one of the only six lock hospitals in the kingdom has been closed. From one point of view this might perhaps be considered a good thing, for a special ward for syphilis in a general hospital is a far better way of treating this only too common and disastrous complaint. To have been a patient in a lock hospital does not exactly serve as a certificate of good conduct and therefore in our estimation the establishment of a lock ward in a general hospital is more in accordance with true charity. But the closing of the Liverpool Lock Hospital acts with peculiar hardship, for it is a fact, though one hard to be believed, that in all Liverpool not one general hospital other than the workhouse infirmary will receive a person suffering from syphilis as an in-patient. So now, owing to the closure of the Lock Hospital, the only refuge for the syphilitic is the workhouse. We cannot think that a city like Liverpool, which is wealthy, and which has a large Roman Catholic as well as Protestant population, can possibly continue in a course of action so absolutely opposed to the teachings of Christianity. Granted that syphilis is a form of disease often, though by no means always, acquired through irregular sexual intercourse, that is surely no reason why the sufferers from it should be treated as outside the pale. A separate ward is a necessity on account of the need for guarding against infection, but there is no reason why a general hospital should not set aside one ward at least for the reception of such patients. Some of the metropolitan hospitals do so and why should not others? If it be impossible to re-open the Lock Hospital—and we trust even now

it is not too late to take this step—for the sake of humanity alone let one general hospital at least take pity upon those sorely afflicted and by so doing affect for good the health of possibly many generations to come.

## THE CHEMISTRY OF SAUSAGES.

THE composition of the sausage is not only complex but it is often obscure. In this country the preparation of this (as it should be) useful article of food is confined to the employment of minced beef and pork. The only exception probably is the so-called "black pudding" which is made with pig's blood and perhaps some heart and kidney. Abroad, however, the sausage is compounded of a much wider range of substances. These include brains, liver, and horseflesh. The last substance is generally considered repugnant, while of course it is fraudulent to sell sausages as beef or pork containing horseflesh. Occasionally, however, sausages do not contain meat at all but only bread tinged with red oxide of iron and mixed with a varying proportion of fat. The remarkable feature of horseflesh is the high proportion of glycogen which it contains, and this fact enables the presence of horseflesh to be detected with some amount of certainty. The test which depends on a colour reaction with iodine has recently been more carefully studied and with more satisfactory results, so that the presence of 5 per cent. of horseflesh in sausages can be detected. At present there is no legal provision for a standard in regard to the composition of sausages, but clearly there ought to be. Limitations should be laid down as to the amount of bread used, as to the actual proportion of meat substances present, and as to the colouring matters added to give an attractive appearance of fresh meat. Sausages are extremely liable to undergo decomposition and become poisonous owing to the elaboration of toxic substances during the putrefactive process. Bad or rancid fat is very liable to alter the character of a sausage for the worse. Thus in some instances the use of bad or rancid lard has rendered the sausage after a time quite phosphorescent, an appearance which indicates, of course, an undesirable change. The smoked sausage is a much safer article of diet than the unsmoked sausage, since the curing process preserves the meat substances against decomposition by reason of the empyreumatic bodies present in the wood smoke which is used for this purpose.

## MEMORIAL STATUE OF SIR THOMAS BROWNE.

FOREMOST among the names of literary eminence and philosophy associated with Norwich is that of Sir Thomas Browne, M.D., who resided there for 46 years and who died and was buried in the church of St. Peter Mancroft of that city in 1682. It was there that he wrote his chief works—the "Religio Medici," "Christian Morals," "Vulgar Errors," and "Urn Burial"—the first and last of which have not only obtained a permanent place in literature but have been regarded with a growing appreciation extending up to the present time. It is fitting, therefore, that Norwich should be the place of any statue to be erected to his memory and in recognition of the distinguished position which his works have occupied, and will continue to occupy so long as great thoughts, learning, and a charming literary style command attention or constitute a claim on our admiration. Although Norwich was the scene of Sir Thomas Browne's life and labours his reputation and his works belong to the world. The author of "Religio Medici" was a great and good man well deserving of being honoured. The committee constituted for the purpose of perpetuating the memory of their distinguished citizen have very naturally made their first appeal to the inhabitants of Norwich and its neighbourhood, but they consider that as the interest and gratification derived from Sir Thomas Browne's writings have never been circumscribed within any local limits so all who have admired and benefited by them have a right to participate in the privilege of honouring his memory. A very strong and representative committee, of which Sir Peter Eade, M.D., is the chairman, has been already appointed and has inaugurated a movement for erecting a statue to Sir Thomas Browne in the city with which he was so long associated, and there can, we think, be little doubt that a memorial worthy of his name and reputation will be the result of their action. Sir Thomas Browne has special claims on the medical profession, for he was a leading physician in his day, but it was notably as a moral philosopher, naturalist, and charming writer that he shed lustre on the profession to which he belonged.

## CHELSEA CLINICAL SOCIETY.

TWO special meetings of this society open to all members of the medical profession are to be held (by kind permission of the director) at the Jenner Institute of Preventive Medicine, Chelsea-gardens, S.W., on Tuesday, April 18th, and Tuesday, April 25th, at 3.30 P.M. The subjects of discussion will be Recent Investigations relating to the Etiology, Prevention, and Treatment of Tuberculosis. The following is the proposed order of the proceedings. On Tuesday, April 18th, the Bacteriology and Pathology of Tuberculosis will be treated by Professor Sims Woodhead, Professor Sidney Martin, and Professor Watson Cheyne. On Tuesday, April 25th, Dr. C. Theodore Williams will speak on Preventive and Climatic Treatment, Dr. J. Edmund Squire on General Preventive Treatment, Dr. R. Maguire and Dr. S. H. Habershon on General Treatment, and Dr. F. R. Walters on Sanatoria.

## AMYOTROPHIC LATERAL SCLEROSIS.

THIS disease has been known since about 1861 and Collins in 1896[1] succeeded in finding 72 cases with necropsies recorded up to that date. Dercum reports the following case of interest in which the necropsy was carried out in an exceptionally full manner.[2] A man, aged 53 years, had suffered for six months from pain in both legs below the knees, followed by an undue feeling of weariness in the legs after walking. On admission to hospital there was moderate spasticity with increase of reflexes. He could now walk only with the aid of crutches. He lost the power of whistling, the speech gradually became indistinct, and the spasticity progressed and finally involved the arms. At this stage he was quite bedridden. The feet swelled and eventually eczema rubrum developed in both legs. Bed-sores were formed on the elbows, the heels, and the sacrum, but after treatment the general health improved and the sores disappeared. The feet were in a position of extreme extension, the knees and ankles were rigid, the knee-jerks were much increased, and the muscles of the leg were firm but generally wasted. The upper limbs were similarly involved but to a less degree. There was no cutaneous anæsthesia. At a later stage paresis of the muscles of deglutition supervened, the general condition again became one of feebleness and prostration, there was paralysis of the sphincters, and finally there appeared hæmaturia and gradual cardiac failure, ending in death. At the necropsy the arteries were found to be generally sclerotic. The spinal cord seemed normal to the eye. Microscopic sections (prepared with thionin) showed considerable atrophy of the anterior cornual cells and in many this seemed to be of the pigmentary type—"occasionally a mass of pigment is all that remains of what was a cell." The anterior spinal roots were slightly atrophied. Other cells (in the posterior cornu and intermediate region) were normal and so were the posterior roots.

[1] American Journal of the Medical Sciences, vol. cxi., p. 680.
[2] Journal of Nervous and Mental Disease, February, 1899.

The crossed and direct pyramidal tracts were much degenerated and yet intermingled with degenerated fibres were many normal ones. The antero-lateral columns also showed some sclerosis. The posterior columns of Goll showed moderate diffuse sclerosis; but Marchi's method revealed no recent degeneration. The degeneration of the pyramids was less distinct towards the medulla and it practically ceased at the pons. The cells of Clarke's column were normal. The posterior nucleus of the vagus had many cells showing great and even extreme pigmentary degeneration; the facial, hypoglossal, and "ambiguous" nuclei showed only a few degenerated cells. "Amyloid" bodies of varying sizes were present in the grey floor of the fourth ventricle. Portions of the biceps, tongue, and thigh with carmine staining and with Marchi's method showed no disease or degeneration. The larynx (crico-arytenoid posticus muscle) showed small patches of interstitial myositis with nuclear hyperplasia in these patches. The cerebral cortex (paracentral lobule) appeared normal and the white subcortical substance showed (with Marchi's method) no degenerated fibres. Sections of the cerebral peduncles and pons showed (with Weigert's method) no degeneration of fibres. The viscera of the thorax and abdomen were normal (except the bladder which was injured quite late in the course of the disease by catheterisation while in a state of paralytic distension). The lesions of the spinal cord agree with those described and figured by Déjerine and Sottas [3] and with cases recorded by Brissaud, Oppenheim, and others. The discussion of the facts points, on the whole, to a vindication of the views of Charcot on the nature and localisation of the spinal lesions in this disease.

## SALT FISH.

AT the present time salt fish can hardly be said to be a popular article of diet with the majority of English people, but perhaps there are few who do not take it at least twice a year. It seems rather curious to look back to the time when salt fish was considered of sufficient importance to engage the attention of Parliament. It happened, however, in the thirty-first year of the reign of Edward III. that complaint was made to the king by the Commons of this realm of England that the salt fish of Blakeney was at such a price ("a trop chier et excessif pris") that the people were much prejudiced thereby. The king, with the assent of the prelates and other great men and the Commons, ordained and established rules with regard to the sale of this fish that the ships called "doggers and lode ships" which belonged to Blakeney Haven and to the adjacent coast should land all their fish at Blakeney between certain points. The punishments for breaking this law were imprisonment at the king's pleasure and forfeiture. The places on the adjoining coast which were affected by the law were Shiringham, Crowmer, Clay, and Suyterley. The fish which were affected by the statute were "orgeys" and "loych fish"—meaning lob, ling, and cod. At even an earlier date than this regulations had been made with regard to the price charged for Yarmouth herrings; so that complaint as to the price charged in London for fish is by no means of recent date.

## SERUM TREATMENT OF ANTHRAX.

IN the *Gazzetta degli Ospedali* of March 19th Dr. F. Abba and Dr. G. Piccardi of Turin give details of a case of anthrax pustule successfully treated by means of Professor Sclavo's anti-anthrax serum. The patient, a youth 17 years of age, on Feb. 26th discovered in front of his right ear a small pustule which increased in size during the two following days, the surrounding area at the same time becoming swollen and red. On March 1st, when the medical men first saw him, the pustule had an irregular blackish surface and was surrounded by vesicles the fluid of which contained numerous bacilli similar to those of anthrax; the whole right side of the face was greatly swollen; the evening temperature was 38·6° C. (101·4° F.). That evening the patient received a subcutaneous injection of 22 cubic centimetres of the anti-anthrax serum. On the morning of March 2nd the œdema was increased, the eye was completely closed, and much fluid had escaped from the vesicles during the night; the temperature, however, had fallen to 37·5° C. A second injection of 11 cubic centimetres of the serum was given. In the afternoon the patient was free from fever and the eyelids were beginning to open. On the morning of March 3rd the swelling was limited to the cheek and to the external corner of the eye and the case rapidly went on to recovery. The diagnosis of anthrax was confirmed by inoculations made on guinea-pigs, the animals dying in from 36 to 48 hours. It was found that when guinea-pigs were inoculated with fluid collected from the vesicles 10 hours after the first injection of the anti-anthrax serum they survived from seven to eight hours longer than those which had been inoculated with fluid collected before the beginning of the treatment, whilst fluid collected 34 hours after the beginning of the treatment did not cause death. This one is said to be the twenty-seventh case of anthrax which has been successfully treated with Professor Sclavo's serum.

[3] Archives de Physiologie, July, 1896.

## THE ATTORNEY-GENERAL OF THE ISLE OF MAN ON THE MEDICAL ACT.

THE Medical Bill for the Isle of Man has been read a third time and passed. As we said last week it follows slavishly in the lines of the English Acts. On the second reading the Attorney-General, while maintaining that the Bill was an advance towards proper legislation, admitted that it was by no means a satisfactory measure. We reproduce some of his remarks, which are creditable to his judgment and may be useful for the guidance of our own legislators. The Attorney-General said: "The great difficulty in the Act which governs England at present and which this Bill will be like is that it does not prohibit the practising of quacks. There is nothing to make it illegal for any person however wanting in qualification to practise." He further said: "My own opinion, formed after careful consideration of the subject and backed up by the medical profession, is that the proper law would be to make it illegal to practise." The Attorney-General is right. He knows that in legal business, which is chiefly concerned with property, qualification is essential to practise, and that life being more valuable than property should receive greater instead of less protection at the hands of the law.

## ALLEGED NEGLECT AT THE WOKING COTTAGE HOSPITAL.

ON March 25th Mr. G. F. Roumieu held an inquest upon the body of Henry Owen, aged 53 years, who had died in the Woking Cottage Hospital. The inquest was held owing to the deceased's son having complained to the police of the treatment which his father had received while in the hospital. The son gave evidence that he had seen his father in the hospital and that his father had complained that he was not properly attended to. He believed that this was so but he did not mention it at the time to any of the hospital authorities. All the deceased's relatives came and went as they liked and the witness's mother stayed several nights at the hospital. The witness did not feel any gratitude to the hospital and he believed that his father was left for hours without attention. The death certificate gave as the primary cause of death septic extravasation of urine and the secondary cause as

cardiac failure. The witness was not satisfied with the certificate, although he had nothing to complain of in Mr. Phipps's treatment of his father. The widow of the deceased gave similar evidence. The nurse and the matron gave evidence to the effect that the patient was never left alone for hours. The coroner made some very strong observations about the freedom with which visitors were allowed at all hours, and the jury returned a verdict in accordance with the medical evidence and they entirely exonerated the hospital authorities from all blame. We do not doubt in the least that the deceased thought that he was neglected or that the relatives believed the statement. But everybody knows that patients suffering from extravasation of urine very commonly suffer from delusions; those ignorant of such matters may very well believe statements made in this way. It is to be hoped that this occurrence will not, as the coroner remarked, raise a prejudice against the hospital, for cottage hospitals are a great boon to rural districts.

## THE MELTING POINT OF FATS.

IT is well known that the melting point of a fat under examination affords a useful guide to the elucidation of its nature and probable origin. Thus the determination of the melting point of fat is important in making an analysis of substances intended for food. The different fats used as articles of food have a wide range of melting point. Butter has a low melting point, while the melting point of suet is comparatively high. The simplest way of ascertaining the melting point of a given fat is to place some of the solid fat on a loop of platinum wire and then to immerse it in cold water, next to gradually raise the temperature and note that point at which the fat becomes translucent. The process may be reversed and the point noted at which it becomes opaque again. The method is not exact, the accuracy of the observation depending largely upon that personal element which enters into a good deal of analytical work. A more exact method has been recently proposed which seems easy of manipulation and which should give concordant results. Two platinum wires are coated with the fat under examination and then dipped into a cup containing mercury and connected with a battery in the circuit of which an electric bell is placed. The mercury is then gradually warmed, the temperature being noted by means of a thermometer immersed in the fluid metal. A point arrives at which the fat will be melted on the platinum wires and the platinum gaining contact with the mercury an electric current is established which is indicated by the ringing of the bell. The reading of the thermometer is then observed. The process is very ingenious and it should be a valuable aid in the discrimination of fats and in affording a clue as to the probable nature of a fat in a given food under analysis.

## THE MEDICAL DEFENCE UNION.

"A YEAR'S Work in Medical Defence" is the title of the annual report and statement of accounts for the year 1898 of the Medical Defence Union—a society which is doing most useful work. A perusal of the report will give some idea of the enormous number of cases considered by the Council of the Union during the year. The work of the Union not only consists in defending its members from charges of various kinds brought against them during the year, but also in prosecuting unqualified practitioners and in other ways assisting in maintaining the status of the medical profession generally. The Council also had to deal with certain cases of undoubted personation—that is to say, cases in which an unqualified person has assumed the name and qualifications of a qualified practitioner. The Nugent case was an example of the kind. In many important cases also the representatives of the Union have rendered great aid to the Treasury in criminal prosecutions, and this assistance has been duly recognised and appreciated. Medical men are at all times liable to have attacks made upon them. It is a very serious matter for a member of the profession when served with a writ claiming damages for alleged malpraxis or presumed negligence to have to defend himself; but with the full resources of the Union to aid him and with the skilled assistance provided for him as a member the anxiety is lessened considerably and the cost becomes comparatively trivial. Assuming that a member has claimed the aid of the Union and has had his case accepted he practically has no further trouble to meet until, should the case go for trial, he has to give evidence upon his own behalf. In every case taken over by the Council the best legal assistance is given and where necessary leading counsel are instructed. As stated in the report the members feel that no case is lost either by want of care or by the non-employment of skilled legal advice. It has become well recognised that the Union never under any circumstances compromises any action undertaken on behalf of a member which involves his professional honour or reputation and this wholesome principle has told its tale with marked effect upon reckless and blackmailing litigants and their advisers. The mere receipt of a letter from the general secretary indicating that the medical man threatened was "a member of the Medical Defence Union" has in itself been sufficient to effectually put a stop to any further threat or proceedings. There are several reasons therefore why it is advisable for a medical man to join this or some kindred association, both from purely personal and from general professional standpoints; he may find such a course useful in defending himself from an unjustifiable attack and he will also aid in maintaining the honour and integrity of his profession.

## THE STRUCTURE OF NERVE CELLS.

IN an article published in a recent number of the *Archives Italiennes de Biologie* Professor C. Golgi gives the results of some observations which he has made upon the structure of nerve. In the first place, by the action of certain reagents he believes that he is able to demonstrate the presence of a special investing membrane in various nerve cells and, secondly, that he is able to show that there is a peculiar reticular structure in the interior of nerve cells. The methods which he has adopted in making the preparations are the well-known chromo-argentic method and more particularly a mode of rapidly hardening small fragments of nerve-tissue in a mixture of two or three parts of a 3 per cent. solution of potassium bichromate and one part of a 1 per cent. solution of osmic acid and then exposing them for a short time to dilute solution of nitrate of silver (0·75 to 1 per cent.). The addition of a 10 per cent. solution of phosphate of soda to the osmio-bichromic solution is advantageous and the fragments can be allowed to remain in this fluid for some days. Sections should be made from time to time to see the effect produced. The cell covering that can be demonstrated by these means is sometimes continuous and homogeneous and sometimes it appears in the form of delicate scales disposed side by side; more frequently, however, it presents the appearance of a fine and delicate network, with uniformly round and regular meshes which completely invests the cell body and is prolonged upon the protoplasmic processes of the cell as far as to the second and even the third division, but on these it becomes a more continuous and homogeneous layer. The scale-like and striated characters of the investment are particularly observable on the cells of Purkinje in the cerebellum. The second structure to which Professor Golgi draws attention is a delicate network which he shows

to exist in the interior of the cell—a reticular structure that is so distinctive as to enable it to be easily recognised even when seen only in a small segment of a cell. It consists of flattened fibres, rendered brown by the action of the above-mentioned reagents, which unite in nodal points. These nodes appear to be small discs of circular form and with transparent centre. The filaments near the periphery seem to be upon the same plane, but nearer the centre they dip in all directions into the cell substance; peripherically they terminate in pyriform swellings from which again very fine filaments proceed towards the periphery. The specimens should be kept in glycerine. Professor Golgi considers that the presence of the external continuous or reticulated investment of the nerve cell is opposed to the view that nerve impulses are propagated by contiguity since it would act as an insulator. Professor Golgi is unable to suggest any purpose in the reticular structure which he has discovered in the cell plasm.

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WE are requested by the honorary secretary of the Jenner Society (Dr. Bond of Gloucester) to ask any of our readers practising in localities in which the agitation against vaccination may be acute, either in the form of newspaper correspondence or of impending lectures or debates, to be good enough to communicate with him. If newspapers are sent with reports the article to which it is desired to call attention should be marked.

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THE spring meeting of the Medico-Psychological Association, South-Western Division, will be held at the Grand Pump Room Hotel, Bath, on April 18th, at 2.45 P.M. After the election of new members and the transaction of other business, communications on Hallucinations of the Olfactory Sense, the Incidence of Alcoholism to Insanity, &c., and Cases of Major Operations on the Insane will be read.

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MR. JERRARD of Regent-street, W., has published an interesting picture, 18 inches by 15 inches, of the staff of Guy's Hospital. The grouping is very well arranged in the board-room and the portraits are most satisfactory.

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THE death is announced at the age of 73 years of Dr. William Squire, M.D. St. And., F.R.C.P. Lond., consulting physician to the St. George's Hanover-square Dispensary.

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WE are informed that the Long Vacation classes of the Cambridge Medical School will be held as usual this year.

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## TYPHOID FEVER AT PHILADELPHIA.

ONE of the largest and most important cities of the United States is to-day in no enviable position. Since Jan. 1st, 1899, and up to March 24th there have been no less than 4880 cases of typhoid fever, resulting so far in 490 deaths, in Philadelphia. This is not only a material disaster, it is a moral disgrace, for there is a general consensus of opinion which blames the local authorities and attributes the epidemic to their gross neglect of obvious duty. Typhoid fever is endemic in Philadelphia, but it has now assumed the epidemic form. According to the *New York Medical News* there has been an annual average of nearly 3000 cases of typhoid fever and over 500 deaths from this disease in Philadelphia during the last ten years. This paper adds: "The present state of affairs is a blot upon civilisation, a crying shame in the face of the world. No Philadelphian should presume to raise his voice on any question of general interest and importance while the city in which he lives is under this awful cloud." The state of affairs, the writer insists, has during the last fifteen years "grown worse not better." The *Philadelphia Medical Journal* adds, "And yet councils sit meekly by and let the carnage go on. The largest number of cases and of deaths comes from portions of the city supplied from reservoirs by practically direct pumpage. But the lesson seems to be lost on our City Fathers, although clear enough for the mind of any school-child—Philadelphia's most immediate need is filtered water."

The present epidemic is not the first warning which has been given. In 1876 there was a widespread epidemic of typhoid fever which caused 761 deaths. On that occasion—that is to say, so far back as 23 years—the impurity of the water-supply was strenuously denounced. The area covered by the Centennial Exhibition and the numerous surrounding hotels and boarding houses were drained into the river Schuylkill; and the river water, though thus contaminated, was pumped through the service mains to all parts of the city. In the following year (1877), however, there was no epidemic, though there were still many deaths from typhoid fever. The general death-rate had been 22·88 per 1000 in 1876 and was only 18·81 per 1000 in 1877. The decrease in the deaths due to typhoid fever continued in the years 1878, 1879, and 1880; but there was a recrudescence in 1881 when 645 deaths were attributed to this disease. The endemic character of this high death-rate is proved by the fact that there were not less than 600 deaths per annum from typhoid fever during the six years from 1881 to 1887. In 1888 the disease became still more general and 785 persons died from typhoid fever. This occasioned some alarm and the authorities then made elaborate investigations as to the cause. The prevalence of typhoid fever was at that time attributed to water pumped from the Delaware river. The intake of the pumping station at Otis-street wharf was close to the outfall into the river of the Cohocksink sewer. It was therefore decided not to use this pump any more and then the prevalence of typhoid fever abated. Later the pumps were again set in action, but as this at once produced a return of the fever the waterworks at Otis-street were definitively abandoned. In 1889 when the Otis street supply was used during a part of the year there were 736 deaths from typhoid fever. In 1890 there were 666 deaths from this disease; 440 in 1892, 456 in 1893, 370 in 1894, 469 in 1895, 402 in 1896, 401 in 1897, and 639 in 1898. Of the latter it is stated that 73 per cent. were soldiers who had contracted the disease in Southern camps and were brought to the hospitals of Philadelphia during the months of August, September, and October, 1898. It would be interesting to know whether the dejecta from these soldiers were properly destroyed or whether they were drained away into the river which supplies Philadelphia with its drinking water. In any case this river is evidently highly contaminated.

Dr. George Woodward, as a member of the Board of Health, has recently investigated the sources of pollution of the Schuylkill river. He says that thousands of notices have been sent to householders advising them to boil their water, but adds that, though it is very proper that people should know of the deplorable condition of the water furnished to them, yet he does not think it right to refer to the Schuylkill river as an open sewer. This latter assertion is not, however, borne out by the details given in Dr. Woodward's report. At most it only amounts to this, that in certain portions of the river the water seems to be fairly clear. Thus a sample taken from Mill Creek, below Rosemont, was clear, odourless, and looked like good drinking water. When, however, the analyst of the board, Mr. William C. Robinson, examined this sample he found that it contained sewage material in active decomposition. At West Conshohocken another sample was taken from Gulf Creek. It is described as turbid and smelt of waste water from woollen mills. It contained so large a quantity of albuminoid ammonia as to be totally unfit for drinking purposes. The same results were obtained on analysing samples from Saw Mill Creek, Norristown, and opposite, at Bridgeport, the water had a black soapy scum on its surface. A canal which runs through the town and into the river is lined with stables and manure heaps, and receives the waste water from many mills. All along the river hundreds of mills drain their poisonous dyes and refuse into the water. These are situated at Reading, Pottstown, Birdsboro', Port Providence, Phœnixville, Royersford, Spring City, and other places. This ruthless contamination of the water is not, however, the only grievance—the supply is also

deficient in quantity. The river is large enough to provide for all needs, but the pumping-stations have been shamefully neglected and the quantity of water which they provide notably to the Germantown or 22nd Ward, is altogether insufficient. Mr. Tattnall Paulding, President of the Delaware Insurance Company, writes to the authorities that "this section of Germantown in which I reside is without a sufficient supply of water for safety either in the matter of health or fire," and adds, "I desire to give notice that should loss occur by fire, or should typhoid fever or other fever occur in my house of a nature proceeding from defective flushing of the pipes I shall hold you officially responsible, since there is absolutely no reason why Germantown should not be supplied with sufficient water for at least the flushing of the pipes and for fire purposes. As to its foul and disgusting condition I have nothing to say at this time, but I do demand a sufficient quantity, such as it is."

At the Manufacturers' Club a meeting was held and an influential committee appointed "to coöperate with the Bureau of Water to secure from councils such legislation as will prevent waste, and obtain appropriations to provide an ample and good supply of water, and that an initial filtration plant or plants be installed pending any measure which may afterwards become necessary for securing our supply from other sources now remote." The committee appointed according to this resolution having made inquiries now reports that the deplorable condition of the water-supply is due to the persistent refusal of the councils to make the necessary appropriations for improving the water plant. In 1896 it was estimated that $2,835,150 were needed for such improvements and extensions. After many ardent discussions the municipal council granted the Water Bureau $1000. In 1897 it was calculated that $3,327,750 were required for the waterworks, but not a single dollar was granted either during that or the following year. The consumption of water in Philadelphia has greatly increased of late years, but part of this increase is attributed to waste and the introduction of automatic closing valves is very necessary. At Spring Garden, where the largest pumping-station is situated, the engines cannot work to their full capacity for want of proper boiler-pressure, and the stock of coal would not last more than five days, so that in the event of a blizzard or a railway servants' strike the water-supply might be stopped altogether. Thus it will be seen that the municipal council have not only refused to provide means of filtering the water but there has been an all-round neglect of the question in all its details. No wonder that these supine authorities are now roundly abused and are constantly declared to be guilty of wholesale manslaughter when, indeed, a stronger word is not employed. That the council should hesitate to incur the enormous expense of bringing water from a pure but distant source may be understood, but there is no reason why they should not have organised long ago better methods of pumping, a better fuel-supply, and some provision for the prevention of the waste of water. Finally, when water is taken from a river which receives the crude sewage of vast populations and the untreated refuse from innumerable manufactories, the least that can be done is to institute filtering-beds of the best and safest description. That this has not been even attempted is due, we are told, to local political or party intrigues and exigencies.

It is not surprising that under these circumstances a powerful agitation has been started in favour of water reform. But at the same time and so as to avoid a reaction which would be dangerous to the cause of sanitary reform in general it should be made quite clear that a pure water-supply is not the only sanitary measure required. If contaminated water alone sufficed to produce typhoid fever everyone in the town who drank the water would have the fever. It is true that many towns which have secured a supply of pure water have a very low death-rate from typhoid fever. Dr. A. C. Abbott, the chief bacteriologist of the Board of Health, has prepared tables showing that cities supplied with pure mountain spring water—namely, Berlin and Munich—have an annual death-rate from typhoid fever which only amounts to four per 100,000 of the population and that at Berlin, London, the Hague, Rotterdam, and Edinburgh, where the water is properly filtered, the rate is only equal to 8·3 per 100,000, whereas at Philadelphia the rate is 60·8 per 100,000. But these figures are incomplete. Toulon, Havre, and Belfast have excellent water-supplies yet these towns have been decimated by typhoid fever. The water-supply of Marseilles is sometimes muddy but it is not contaminated and but few towns have shown a greater susceptibility to cholera and to typhoid fever. Finally, if we take the town of Philadelphia itself three important facts stand out in the history of these typhoid fever epidemics. Firstly, the general death-rate was not increased in a notable manner during the years when typhoid fever was especially prevalent; secondly, during the present epidemic it is estimated that 50 per cent. of the victims are children; and, thirdly, the disease is very unevenly distributed all over the town. During the week ending March 18th 477 cases were reported from the 40 wards into which the town is divided. In Ward 3 there was but one case, in Wards 11, 13, 16, 17, and 35 there were three cases, in Wards 5, 12, 18, and 31 there were four cases; but in Ward 20 there were 21 cases, in Wards 33 and 38 there were 25 cases, in Ward 28 there were 32 cases, in Ward 15, 41 cases, in Ward 22, 45 cases, and in Ward 29, 47 cases. If the water is the only cause of this outbreak of typhoid fever why this extraordinary difference in the distribution of the disease and why also are there such a large number of children ill? Evidently other causes are also at work. Contaminated water is undoubtedly a very efficacious means of producing typhoid fever among those who are predisposed, but persons whose reduced vitality renders them an easy prey to this disease are likewise liable to contract other diseases. If they have pure water this does not always mean that their lives will be spared, but it may simply mean that they will die from some other disease. Sanitation comprises two distinct lines of action. Measures must be taken to prevent the spreading of pathogenic germs, therefore a pure water-supply must be secured. But it is quite as important to take such general sanitary measures—the prevention of overcrowding, proper drainage, &c.—as will prevent that predisposition to disease which renders epidemics possible. In all probability careful local investigation would show that in those wards where the epidemic has proved especially fatal there are other causes at work besides the foul water-supply. The present is an excellent opportunity for bringing to light all these defects and for obtaining the sanction and popular approbation for all measures of reform dealing, not only with the water-supply, but with many other sanitary defects which undoubtedly exist.

## TYPHUS FEVER IN LONDON.

THE following is a special report which has been presented by Dr. Waldo to the Vestry of St. George's, Southwark, on this important subject:—

LADIES AND GENTLEMEN,—On Feb. 20th, 1899, a case of typhus fever was notified to me as occurring at No. —, Southwark Bridge-road. On inquiry I found that the patient had come from Bermondsey suffering from the malady and that several of her relatives had been attacked with mysterious illnesses. During 1898 two other cases of typhus fever occurred in this parish. The first of these was in April and was traced to Kensington, but did not spread in St. George's. The second occurred in October and its origin could not be ascertained. Some of the members of the infected family went to a house in Bermondsey where the disease subsequently developed. Under these circumstances it occurred to me that there might be a possible connexion between the case notified to me last October and the one brought to my notice in February. On inquiry I found such a connexion and was enabled to trace the following interesting and suggestive train of events.

When the first case was notified I closed the house and induced all the inmates to enter the reception house with the exception of the father who went away and slept two nights at No. — (*a*), Minto-street, Bermondsey. This fact I at once communicated to the medical officer of health of Bermondsey. In the house at No. — (*a*), Minto-street there were resident four families. On or about Dec. 15th Mrs. F——, a resident at No. — (*a*), was taken ill and was admitted to Guy's Hospital on Dec. 18th. She was there treated for supposed enteric fever and was discharged to a convalescent home on Jan. 22nd. The father's visit to No. — (*a*) was paid to his son and daughter-in-law, who on Dec. 24th, 1898, removed to No. — Tabard-street, Newington. On Jan. 13th, 1899, the son was taken ill and removed in a delirious condition to Newington Workhouse where he died on Jan. 18th. The wife of the last patient was taken ill about the same date and died at the aforesaid No. — Tabard-street on Jan. 14th. Returning to No. — (*a*), Minto-street we find that Mrs. F. who was first attacked there on the night before she went into Guy's called at No. — (*c*), Minto-street and arranged for one of her boys being taken there as a lodger. At the same time she interviewed a woman from No. — (*b*) who undertook to take charge of a second son. Towards the end of January the son who had been left at No. — (*b*), Minto-street was removed to St. Olave's Union Infirmary where he still remains at the time of report (March 13th, 1899). Returning to No. — (*c*), Minto-street we find it inhabited by the W—— family—father, mother, three sons, and two daughters, and the recently admitted son of Mrs. F——. Seven of these eight persons were admitted to hospital at various dates up to March 7th, and all these cases have been recognised either at the time or subsequently as typhus fever. The son, Richard W——, was taken ill on Jan. 14th and admitted on the 19th to King's College Hospital, where he died on the 30th. The son, Frederick W——, was

notified as enteric fever on Feb. 11th, admitted to Guy's Hospital, found later to have typhus fever, and sent to the South-Eastern Fever Hospital.

F——'s son was notified enteric fever on Feb. 15th, sent to Guy's Hospital, also found later to be suffering from typhus fever, and despatched to the South-Eastern Fever Hospital, where he and Frederick W—— still remain. Mrs. W—— was admitted on Feb. 14th to the Park Hospital where she is still under treatment. The father was notified as enteric fever on Feb. 18th and taken to Guy's Hospital where he died on the 22nd. The daughter, Alice W——, entered Guy's Hospital on March 4th and was sent to the South-Eastern Hospital with typhus fever on March 6th. The son, George W——, went into St. Olave's Union Infirmary on Feb. 21st and was removed with typhus fever on March 7th to the South-Eastern Hospital.

My own patient, Mrs. B——, was notified on Feb. 20th, from Guy's Hospital, as having resided at No. —, Southwark Bridge-road, in the parish of St. George the Martyr. She had removed to that address two days previously from No. —, Weston-street, Bermondsey. On inquiry a direct communication with the group of cases at No. — (c), Minto-street was established by the fact that she sat up one night with her brother, Richard W——, while a patient at King's College Hospital, where he died as already stated on Jan. 30th. Other cases doubtful in nature and origin are still under investigation.

On the strength of the above facts I think we may be fairly justified in arriving at the following conclusions:—1. That there has been a direct chain of communication between the two cases of typhus fever notified in the parish of St. George the Martyr on Oct. 19th, 1898, and Feb. 20th, 1899. 2. That the infection was carried out of the parish by the father of the first patient. Had he entered the reception house with the rest of the family in all probability the centre of original infection would have entirely been stamped out.

In conclusion, I have to acknowledge the cordial assistance afforded me in the course of the above investigations by the authorities of the various hospitals, the medical officers of health, and the local medical men concerned.

I have the honour to be, your obedient servant,

(Signed) F. J. WALDO,
Medical Officer of Health.

Vestry Hall, St. George's, Southwark,
March 21st, 1899.

# Public Health and Poor Law.

## LOCAL GOVERNMENT DEPARTMENT.

### REPORTS OF MEDICAL OFFICERS OF HEALTH.

*Kingston-upon-Thames Urban District.*—The milk-supply of Kingston is, Mr. H. Beale Collins tells us, procured in large part from Hants and Dorset, in neither of which counties does he regard the sanitary administration as satisfactory. As he observes, those cowkeepers who possess cows purchase "railway milk" in addition and sell the milk of their own cows to their better customers alone, the poor coming in, in the main, for the "railway milk." Mr. Collins refers to an arrangement made recently at Havre for sterilising milk, the charge to the rich being little and to the poor *nil*. He states that this provision has had a marked effect in reducing the cases of infantile tuberculosis. He suggests that this sterilisation might in this country be carried out by parochial charities. But why not by private individuals?

*St. Marylebone Sanitary District.*—Mr. Wynter Blyth draws attention in his current annual report to the large number of private nursing establishments which exist in certain streets in this district, and he points out that the operations and conditions frequently associated with the patients in these hospitals necessitate the deposit of litter in the streets to deaden the noise of the traffic. As there is no definition of the term "illness" in the Public Health Act it is difficult for the vestry to take action until the straw becomes so offensive as to be a nuisance. Mr. Blyth thinks that the vestry should possess power to regulate this indiscriminate deposition of litter, and the Marylebone Vestry have approached the London County Council with the view of some such powers being provided for by statutory enactment.

*Erdington Urban District.*—An outbreak of enteric fever occurred in the workhouse in this district during 1898 and Dr. Bostock Hill, the medical officer of health, was invited to inquire into it. There were seven cases in all, five being inmates and two being officials, the attacks in so far as the inmates were concerned being confined to one block. Milk and water were, Dr. Hill thinks, easily excluded from being concerned in the causation and he is inclined to attribute the outbreak to the foul condition of the closets connected with the invaded block. The two officials apparently contracted the disease from infected persons or clothes.

*Northwich Rural District.*—The council of this district have apparently declined to re-appoint their medical officer of health, and with regard to the matter Mr. T. W. H. Garstang very pertinently points out that however zealous and successful a medical officer of health may have been he is liable to be removed from office by the simple expedient of the council refusing to re-appoint him. Mr. Garstang regards "the impotence of the Local Government Board in this matter as nothing less than a national misfortune, for sanitary abuses are concealed and sanitary improvements are ignored in all those cases where the power of the council is exerted to muzzle the medical officer of health and to mould his report. There will no doubt be a remedy some day, when the general public is educated up to the point of recognising the necessity for the fearless and honest administration of the sanitary laws independently of local interested control."

*Exeter Urban District.*—The city of Exeter still continues to procure its water from the river Exe, but the council have, it appears from Dr. John Woodman's current report, applied to the Local Government Board for sanction to borrow money to considerably increase the number of filtering-beds and if these works are completed much improvement will ensue. The public abattoir in the city is increasing in favour with the butchers and several cases of tuberculosis—nearly all in cattle imported into the country—have been detected. Dr. Woodman evidently looks forward hopefully to the completion of the sewerage scheme which will have the effect of intercepting the small outfalls discharging into the river as it passes through the town. The whole of the sewage will then be treated by the well-known method of which Mr. Donald Cameron, the city surveyor, is the discoverer.

## VITAL STATISTICS.

### HEALTH OF ENGLISH TOWNS.

IN 33 of the largest English towns 6570 births and 5050 deaths were registered during the week ending April 1st. The annual rate of mortality in these towns, which had been 23·3 and 23·1 per 1000 in the two preceding weeks, was again 23·1 last week. In London the rate was 22·0 per 1000, while it averaged 23·8 in the 32 provincial towns. The lowest death-rates in these towns were 13·2 in Cardiff, 17·1 in Croydon, 17·5 in West Ham, and 18·8 in Leicester; the highest rates were 28·6 in Liverpool, 28·8 in Birmingham, 30·4 in Oldham, and 31·8 in Manchester. The 5050 deaths in these towns included 401 which were referred to the principal zymotic diseases, against 418 and 397 in the two preceding weeks; of these 132 resulted from whooping-cough, 108 from measles, 68 from diphtheria, 38 from diarrhœa, 35 from "fever" (principally enteric), and 20 from scarlet fever. The lowest death-rates from these diseases were recorded in Cardiff, Huddersfield, Halifax, and Gateshead; and the highest rates in Swansea, Birkenhead, Burnley, and Oldham. The greatest mortality from measles occurred in Bolton and Manchester; and from whooping-cough in Plymouth, Bristol, Birkenhead, Burnley, and Hull. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 68 deaths from diphtheria included 31 in London, 10 in Swansea, four in Sheffield, three in Birmingham, and three in Liverpool. No fatal case of small-pox was registered last week in any of the 33 large towns, and only one small-pox patient was under treatment in the Metropolitan Asylums Hospitals on Saturday last, April 1st. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2312, against numbers declining from 2584 to 2355 on the three preceding Saturdays; 167 new cases were admitted during the week, against 217, 224, and 177 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London which had been 565 and 604 in the two preceding weeks, declined again to 505 last week, but were 94 above the corrected average. The causes of 51, or 1·0 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Nottingham, Leeds, Newcastle-upon-Tyne, and in 14 other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Liverpool, Halifax, and Hull.

### HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·0 and 21·8 per 1000 in the two preceding weeks, further rose to 23·3 during the week ending

April 1st, and slightly exceeded the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 18·9 in Paisley and 22·2 in Dundee to 28·1 in Aberdeen and 29·9 in Greenock. The 711 deaths in these towns included 32 which were referred to diarrhœa, 30 to whooping-cough, 25 to measles, four to scarlet fever, four to "fever," and two to diphtheria. In all, 97 deaths resulted from these principal zymotic diseases, against 90 and 67 in the two preceding weeks. These 97 deaths were equal to an annual rate of 3·2 per 1000, which was 1·5 above the mean rate last week from the same diseases in the 33 large English towns. The fatal cases of whooping-cough which had declined from 31 to 22 in the four preceding weeks rose again to 30 last week, of which 12 occurred in Edinburgh, 10 in Glasgow, and five in Leith. The 25 deaths from measles showed an increase of four upon the number in the preceding week, and included 13 in Glasgow, nine in Aberdeen, and three in Edinburgh. The fatal cases of scarlet fever, which had been five and six in the two preceding weeks, declined to four last week, of which two occurred in Glasgow and two in Edinburgh. The four deaths referred to different forms of "fever" corresponded with the number in the preceding week, and were all recorded in Glasgow. The deaths from diseases of the respiratory organs in these towns, which had been 136 and 151 in the two preceding weeks, further rose to 160 last week, but were 18 below the number in the corresponding week of last year. The causes of 38, or more than five per cent., of the deaths in these eight towns last week were not certified.

### HEALTH OF DUBLIN.

The death-rate in Dublin which had been 32·4 and 31·9 per 1000 in the two preceding weeks further declined to 31·6 during the week ending April 1st. During the thirteen weeks of the quarter ending on Saturday last the death-rate in the city averaged 29·6 per 1000, the rate during the same period being 20·5 in London and 23·9 in Edinburgh. The 212 deaths registered in Dublin during the week under notice were within two of the number in the preceding week, and included 12 which were referred to the principal zymotic diseases, against numbers declining from 17 to 8 in the four preceding weeks; of these, three resulted from whooping-cough, three from diarrhœa, two from scarlet fever, two from diphtheria, two from "fever," and not one either from small-pox or measles. These 12 deaths were equal to an annual rate of 1·8 per 1000, the zymotic death-rate during the same period being 1·7 in London and 3·5 in Edinburgh. The fatal cases of whooping-cough which had been 10 and two in the two preceding weeks rose to three last week. The two deaths referred to different forms of "fever" showed a decline of two from the number in the preceding week, while the mortality from scarlet fever and from diphtheria exceeded that recorded in the previous week. The 212 deaths in Dublin last week included 35 of infants under one year of age and 65 of persons aged upwards of 60 years; the deaths of infants showed a slight decline, while those of elderly persons exceeded the numbers recorded in the preceding week. Five inquest cases and six deaths from violence were registered; and 94, or more than a third, of the deaths occurred in public institutions. The causes of 13, or more than six per cent. of the deaths in the city last week were not certified.

## THE SERVICES.

### ROYAL NAVY MEDICAL SERVICE.

THE following appointments are announced:—Surgeons: W. R. Knightley to the Royal Marine Infirmary, Portsmouth, and J. H. Fergusson to the *Excellent*, lent.

### ROYAL ARMY MEDICAL CORPS.

Colonel Richard P. Ferguson is placed on retired pay. Lieutenant-Colonel James A. Clery, M.B., to be Colonel, vice R. P. Ferguson. Major R. F. Adams, M.B., retires from the service, receiving a gratuity. Captain William George Beyts is seconded for service on the Staff. Lieutenant Joseph McArdle, M.B., is seconded for service with the Egyptian Army. Lieutenant N. H. Ross has been attached for duty to the Station Hospital, Kirkee. Captain G. E. Hughes will be held in readiness to embark for service in India. Major C. E. Faunce has embarked for Malta. Major S. E. Duncan has taken over medical charge of the troops and Station Hospital at Londonderry from Major R. L. Love, who has proceeded to Dundalk, to take over medical charge of the troops and station hospital there. Lieutenant-Colonel R. G. Thomsett has taken over charge of the Station Hospital at Belfast and command of No. 15 Company. Major B. M. Skinner has arrived for duty in the Home District. Lieutenant R. E. G. Phillips has been attached to the 1st Life Guards. Major Harwood, attached to the Cambridge Hospital, Aldershot, has been placed under orders for India.

Lieutenant-Colonel John J. Greene retires on retired pay. Captain William S. Boles and Captain Albert L. F. Bate are promoted to be Majors.

### INDIA AND THE INDIAN MEDICAL SERVICES.

Lieutenant-Colonel W. A. Mawson has been appointed Principal Medical Officer with the Tochi Force, vice Lieutenant-Colonel Bookey. The services of Captain W. Young (Bengal) are placed permanently at the disposal of the Government of the North-Western Provinces and Oudh. Surgeon-General W. S. M. Price, is appointed to officiate as Principal Medical Officer, Bombay Command, vice Surgeon-General A. F. Churchill, appointed Officiating Principal Medical Officer, Her Majesty's Forces in India. Lieutenant-Colonel W. J. Charlton, R.A.M.C., is appointed to officiate on the Administrative Medical Staff of the Army with the temporary rank of Colonel, vice Colonel E. Townsend, C.B., R.A.M.C. Major A. R. P. Russell is appointed to officiate as Civil Surgeon and Superintendent of Jails, Mandalay, in place of Lieutenant-Colonel S. H. Dantra. Captain F. J. Dewes is transferred from Meiktila to Rangoon and is appointed to officiate as Civil Surgeon and Port Health Officer, Rangoon, in place of Lieutenant-Colonel G. T. Thomas. Major W. A. Sykes, D.S.O., 8th Bengal Lancers, is placed in charge of the civil medical duties of the Sialkote District in addition to his military duties, vice Major G. W. P. Dennys. Major C. P. Lukis, Civil Surgeon, Agra, is appointed to hold visiting medical charge of Etawah in addition to his other duties. Captain C. M. Moore, Medical Officer of the 2nd Regiment, Central India Horse, is appointed to officiate as an Agency Surgeon of the second class and is posted to the Bhopal Agency.

### ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant-Colonel M. Benny having resigned his appointment in the Volunteers, ceases to belong to the Army Medical Reserve of Officers.

### VOLUNTEER CORPS.

*Artillery:* 1st Aberdeenshire: Surgeon-Lieutenant J. Marnoch to be Surgeon-Captain. 3rd Kent (Royal Arsenal): Surgeon-Major Arthur Henry Robinson, late 2nd Middlesex Volunteer Artillery, to be Surgeon-Major. Surgeon-Captain T. E. Stuart and Surgeon-Lieutenant F. A. Brookes will be transferred from the 1st to the 2nd Essex Volunteer Artillery Corps. *Rifle:* 4th (Cambridge University) Volunteer Battalion the Suffolk Regiment: Robert Williams Michell to be Surgeon-Lieutenant. 2nd Volunteer Battalion the East Yorkshire Regiment: John Chestnutt to be Surgeon-Lieutenant. 4th Volunteer Battalion the Cheshire Regiment: Brigade-Surgeon-Lieutenant-Colonel W. E. S. Burnett resigns his commission, is permitted to retain his rank and to wear the uniform of the battalion on his retirement. 4th Volunteer Battalion the South Wales Borderers: Surgeon-Lieutenant T. E. Lloyd to be Surgeon-Captain. 1st Volunteer Battalion the Manchester Regiment: Surgeon-Lieutenant R. S. Rodger resigns his commission. 2nd Tower Hamlets: James Steel Swain to be Surgeon-Lieutenant. 4th Volunteer Battalion the Devonshire Regiment: Surgeon-Captain C. F. Glinn resigns his commission. 4th (Nottinghamshire) Volunteer Battalion the Sherwood Foresters (Derbyshire Regiment): Surgeon-Captain F. H. Appleby to be Surgeon-Major. 5th (Ardwick) Volunteer Battalion the Manchester Regiment: Surgeon-Captain J. G. Saville to be Surgeon-Major.

### THE WAR IN THE PHILIPPINES.

The Americans have met with a more determined resistance from the insurgent Filipinos than they anticipated. Their brigades had a good deal of fighting in the neighbourhood of Manila and subsequently when they advanced towards the entrenched positions held by the insurgents and drove them back. The Filipinos burned the town of Malabon which is in ruins. The American troops,

mostly volunteers, appear to have behaved with great dash and gallantry in crossing the open under fire from the insurgent entrenchments which had been constructed in numerous directions. The losses on both sides are mounting up; those on the rebel side are heavy. The nature of the country, with its jungles and cover, the great heat at the present season, and the character of the resistance, have proved greater obstacles to success than anticipated, but the forces of the United States are nevertheless bound to succeed in the end. The accounts of the fighting show that the Americans are pursuing the campaign with vigour and dash. We hear but little of the medical arrangements, but we have reason to hope and to believe that they are being much more satisfactorily carried out than was the case in Cuba. We are glad to notice that some of our naval surgeons did all they could in aiding and attending to the wounded during the fighting. A list prepared at the Adjutant-General's office shows that 157 Americans have been killed and 864 wounded in the Philippines since Feb. 4th. What with the capture and destruction of Malolos, the retreat of Aguinaldo, and the dispersion of the forces of the insurgent government, defeated and discouraged as they must be, there are indications that the war in the Philippines is fast coming to a close. The recent proclamation by General Otis, moreover, of the intentions of the American Government should have a reassuring effect upon the Philippine population. Whilst upon this subject we would call attention to a paper lately read before the New York Academy of Medicine by Louis L. Seaman, M.D., LL.B., late Major-Surgeon First Regiment United States Volunteer Engineers, on the United States Army Ration. The paper in question shows, on physiological and hygienic grounds, that several changes are essentially necessary in order to adapt the ration to the requirements of tropical climates. Much of the sickness, invaliding, and loss of life among troops campaigning in such climates is directly due to the food and clothing being opposed to the requirements of the climate instead of being attributable to the climate itself.

### THE TREATMENT OF SYPHILIS IN THE PUBLIC SERVICES.

Medical officers and others interested in the treatment of syphilis would do well to read a pamphlet on the above subject by Major F. J. Lambkin of the Royal Army Medical Corps, published by John Bale, Sons, and Danielsson, Limited, of Great Titchfield-street, W. The author of the pamphlet in question recounts his experience (which has been considerable) of the use of mercurial cream by intra-muscular injection in the treatment of syphilis and enters into all the details connected therewith as well as into those relating to the patients' personal hygiene, diet, &c. The method of treatment pursued at Aix-la-Chapelle, which is by mercurial inunction, is pretty well known, and Major Lambkin went to Aix in order to learn how to carry out this method, but he subsequently found it so difficult to do this thoroughly that it proved impracticable and he therefore had recourse to other methods of attaining the object in view, and finally adopted that based upon the principle advocated by Lang of Vienna who used what may be termed a mercurial cream. The patient receives a mercurial injection, as modified by Major Lambkin, once a week and under ordinary circumstances need not remain in hospital but regularly attends for the purpose. There is one point on which the surgeon is very properly cautioned—viz., that the use of mercury is very easily overdone and sometimes to the grave injury of the patient. The effect of the metal in each individual case consequently needs to be carefully watched in order to guard against this. The body-weight is a good guide and the patient's weight should be regularly recorded whilst undergoing treatment. A difficulty which arises is as to how patients who are exceptionally susceptible to the injurious action of mercury can be safeguarded; but Major Lambkin's experience of intramuscular injections, amounting to over 7000, of a preparation of mercury, lanolin, and carbolic oil, does not appear to have been attended with any evil or mishap. The operation is stated to be practically painless and no soldier has been incapacitated from doing his duty. The perchloride and other watery solutions are, of course, much handier and easier to inject, but their use is attended with more pain and, on the whole, the injection of mercurial cream is preferred.

### MEDICAL STUDENTS AND CONSCRIPTION.

In most of the countries where conscription is in force students of medicine are not called upon to serve until either they have successfully passed their final examinations or else have had a reasonable opportunity of doing so. In the former case they are required to do duty for one twelvemonth only, during which they are almost invariably employed as assistant surgeons, but in the latter they are compelled to carry out ordinary duty in the ranks for a period of three years. In France, however, the arrangements are much less convenient, not to say less reasonable. It is true that medical students are asked to put in one year's military service only and not the usual three, but as a rule the timing of their summons to the colours necessitates the interruption of their professional studies, and, worse still, instead of being drafted into the Corps de Santé where their technical acquirements could be utilised and where they would have an opportunity of perfecting their knowledge of military medicine they are obliged to waste their precious hours in the performance of routine work in the guise of *fantassins* or private soldiers. Ever since the introduction of this foolish and wasteful system in July, 1889, the entire medical press throughout France has not ceased to protest against it, but without avail. The authorities are said to be afraid of responding lest they should then be logically unable to refuse a similar concession to the seminarists or ecclesiastical students. They deem themselves bound to realise the notorious cry, "Knapsacks for the clergy,"[1] and to this end they have no hesitation in not only seriously cramping the sanitary organisation of the army, but also in grievously interfering with the curriculum of the rising generation of medical practitioners. Of late the military journals following the lead of their professional contemporaries have taken the matter up zealously and the present War Minister has shown signs of being more amenable than was his predecessor, General Billot. There would therefore seem to be grounds for hoping that, as one writer puts it, patriotism may be for once triumphant over politics, to the immense advantage of the medical fraternity and above all of the army.

### ARMY MEDICAL SCHOOL, NETLEY.

The summer session of the Army Medical School opened on Wednesday, April 5th. It was attended by 51 surgeons on probation (admitted by competition)—30 for the Royal Army Medical Corps and 21 for the Indian Medical Service. Several nominations have also been given to the medical schools, we believe, and the number for the Royal Army Medical Corps will be thereby augmented. The following is a corrected list of those who have entered the school through competition, the names being given in order of merit:—

ROYAL ARMY MEDICAL CORPS.

1. G. G. Delap.
2. F. Warren.
3. R. A. Cunningham.
4. V. G. Crawford.
5. F. J. Palmer.
6. A. Challis.
7. H. Simson.
8. (Resigned).
9. S. G. Butler.
10. G. H. Irvine.
11. W. A. Woodside.
12. W. R. Blackwell.
13. H. B. Onraet.
14. P. H. Falkner.
15. H. F. Hart.
16. L. F. F. Winslow.
17. H. H. Norman.
18. A. Chopping.
19. J. J. W. Prescott.
20. O. W. A. Elsner.
21. A. L. A. Webb.
22. E. E. Ellery.
23. H. M. Nicholls.
24. F. S. Walker.
25. J. I. W. Morris.
26. H. E. M. Douglas.
27. E. T. Inkson.
28. F. R. A. Hegga.
29. A. A. Seeds.
30. J. A. Langstaff.

INDIAN MEDICAL SERVICE.

1. C. Dykes.
2. W. E. McKechnie.
3. E. D. A. Creig.
4. D. McKay.
5. J. J. Urwin.
6. W. F. Harvey.
7. H. D. Peile.
8. W. E. H. Forster.
9. D. H. F. Cowin.
10. A. B. Fry.
11. C. E. G. Maddock.
12. A. W. Tuke.
13. M. W. Manuk.
14. W. H. Tucker.
15. C. S. Lowson.
16. J. H. Beaman.
17. W. H. Dickinson.
18. G. W. Stewart.
19. D. N. Anderson.
20. J. Sloan.
21. M. N. Chandhuri.

### THE SUPPLY OF AN ARMY IN THE FIELD.

At the Prince Consort's Library, Aldershot, on Tuesday, March 28th, Major-General Hildyard being in the chair, Lieutenant-Colonel F. T. Clayton, A.S.C., delivered a lecture on this subject. General Sir Redvers Buller, who took part in the discussion, said that there was no subject better worth the study of officers than that of supplying an army in the field. His experience had taught him that the more fresh bread the troops got the better they would march. He advocated the principle of throwing the responsibility of hospital supplies on the medical officers. Surgeon-General O'Dwyer and others also took part.

[1] "Les curés sac au dos."

### ARMY RECRUITING.

The new system under which recruiting for the Army will be conducted came into effect last week. Under the altered conditions, while the Inspector-General of Recruiting will continue, in conjunction with the Adjutant-General, to discharge the more important duties attached to the appointment, the general officers commanding districts will be held immediately responsible for the administration and supervision of the recruiting in their commands. They will have a sum of money allotted to them annually for the payment of all expenses connected with recruiting.

### THE CHADWICK TRUST.

The trustees have, on the nomination of the Director-General of the Royal Navy Medical Service, awarded the Chadwick Naval Prize of £100 and a gold medal to Surgeon O. W. Andrews, M.B. Durh., R.N., in consideration of his excellent work at the Royal Naval Hospital at Haslar in connexion with sanitary science.

### MAJOR MARCHAND'S MEDICAL OFFICER.

Dr. J. Emily of the French navy, who accompanied the Marchand mission to Fashoda, has been specially selected for promotion from the second to the first class and is to carry out his new duties at Lorient.

Lieutenant-Colonel Miller, R.A.M.C., writing from the station hospital, Meean Meer, Punjab, suggests that those interested in the welfare of British troops might from time to time despatch to that place newspapers, periodicals, &c., for the use of the sick and convalescent soldiers.

Inoculations against enteric fever have now been carried out by Professor Wright, Professor of Pathology at Netley, at three Indian stations, viz., Bangalore, Pindi, and Lucknow.

Surgeon-Lieutenant-Colonel John O'Connell Hynes, 1st Nottinghamshire Rifle Volunteers, died at Goldsmith-street, Nottingham, on March 25th.

# Correspondence.

"Audi alteram partem."

## INSTRUCTION IN TROPICAL DISEASES.

*To the Editors of* THE LANCET.

SIRS,—May I be permitted from personal experience to express some doubt as to the absolute necessity for the teaching of tropical medicine as a distinctive feature? In the first place so much stress is being laid upon diseases not common in Great Britain that it seems to be forgotten that all the diseases of temperate zones flourish exceedingly within 30° north and south of the equator. I see no small number of diseases of the respiratory organs, rheumatic fevers, tuberculous diseases of bones, &c. In Johannesburg (a subtropical climate) enteric fever, measles, and cholera infantum were, and I suppose still are, responsible for the heavy mortality of that city. In this district (situated in 3° north latitude) diphtheria seems unknown, but at Bogota, the capital (4° 35′ N.), a severe epidemic is now raging. Epilepsy, mental diseases, cretinism, and all diseases of the thyroid gland are but too common in this neighbourhood. As to the so-called tropical diseases I do not believe there really exists more difficulty (if as much) in their diagnosis and treatment, even when seen for the first time, than the practitioner feels at home. I had not seen any cases of malarial diseases in England, but my first cases in the tropics were not more difficult to recognise and treat than my last. It was easy enough to "spot" the first case of bilharzia I saw in Johannesburg, although it was not there endemic and although I had never before seen the ova. It is to be presumed that everyone going abroad will read up any diseases peculiar to the locality he proposes practising in. With the aid of his general medical education and a microscope I believe he will be at no great loss without the special training. We have here a great number of specialities in diseases if I may so name them—e.g., pinta (locally carata), piedra, ankylostomiasis, pterygium, yaws, dengue, and beri-beri—occasionally from the coast. Almost any abdomen will show an enlarged spleen; dysentery and hepatic abscesses are frequent. None of these give me as much trouble as determining an early case of phthisis or the treatment of an infant's diarrhœa.

I do not pretend never to be in doubt as to the diagnosis, but I do maintain that I have felt no hindrance from my non-acquaintance with any of these specialities before practising here. If I ever have the opportunity of further study in Europe my time shall be spent in the wards of a general hospital and not in those of the tropical diseases department. It is likely that the school will be useful to those who do not intend to practise abroad. I can imagine that a case of pinta turning up casually in an out-patient room might puzzle the specialist. My remarks do not apply to research work which to my thinking requires special qualifications; did others think likewise medicine would have fewer absurd views to refute. To avoid other misunderstanding let me say that my examiners considered my intelligence below that of the average medical student.

I am, Sirs, yours faithfully,
M. D. EDER, B.Sc. Lond., M.R.C.S. Eng., L.R.C.P. Lond.

Palmira, Colombia, South America, Feb. 25th, 1899.

## STOCKPORT AND DISTRICT MEDICAL SOCIETY.

*To the Editors of* THE LANCET.

SIRS,—We have been instructed to forward you for publication copies of two resolutions passed by this society at a special meeting held on March 30th, 1899.

We are, Sirs, yours faithfully,
E. A. GOULDEN, H. G. SMEETH, } Hon. Secs.

Stockport, April 4th, 1899.

[COPIES.]

1. That the best thanks of this society be tendered to the Editors of THE LANCET for their editorial on the "Stockport Centre of the St. John Ambulance Association" in THE LANCET of March 25th and for the able manner in which they vindicated the position not only of the medical society but of the medical men of the town.
2. That in consequence of the offensive references and objectionable conduct of the local hon. secretary of the Stockport Centre of the St. John Ambulance Association to the Medical Society and some of its members individually, prior to and arising out of the public meeting held in the Pendlebury Memorial Hall on Feb. 7th, 1899, the members of the Stockport and District Medical Society will reluctantly be compelled to abstain from lecturing in connexion with the local centre as at present constituted, until the hon. secretary withdraws and apologises for such references and conduct; and the society further suggests that the past management of this centre be officially inquired into by the Central Executive Committee in London.

## THE COINCIDENCE OF DISEASES: PLAGUE AND ITS ASSOCIATES.

*To the Editors of* THE LANCET.

SIRS,—We have in the combination of plague with other infectious diseases multiple examples of this coincidence. Relapsing fever running concurrently with plague has been frequently observed and seems rather favourable for the patient than otherwise. Measles are now prevalent in Bombay and several cases of this combination have been observed. Small-pox and also chicken-pox have also been seen with plague. These three diseases, however, do not combine favourably with plague and the dangers to the patients are correspondingly increased. Plague occurs among lepers, in the subjects of early syphilis, and in the tuberculous. The latter class of patients fare very badly. If they survive the plague they soon succumb to phthisis, the poison of plague apparently favouring the development of the tubercle bacillus. Again phthisical patients stand inoculation for plague very badly. Another disease commonly associated with plague is malaria and here fortunately no increased danger apparently supervenes. It would appear that provided the virulency of the plague is not intense so as to carry the patient off in a few hours the malaria poison gains the upper hand, and a case which commenced with the signs and symptoms of plague has substituted in it all the phenomena of malaria. Of the cases of the acute infectious diseases—measles, small-pox, and chicken-pox—mixed with plague there are only a few examples. This is not surprising, because in the first place they are hardly epidemic and because the varying periods of incubation make it an accidental opportunity for study when a compound case is brought to the hospital. The incubation period of plague cannot be fixed to a nicety. It probably averages about three days.—I am, Sirs, yours faithfully,

Bombay, March 20th. FREDERICK PEARSE, F.R.C.S. Eng.

## "CERTAIN ORGANISMS ISOLATED FROM CANCER AND THEIR PATHOGENIC EFFECTS UPON ANIMALS."

*To the Editors of* THE LANCET.

SIRS,—May I correct a few misapprehensions to which Mr. John D. Malcolm's letter in THE LANCET of April 1st upon my paper on the above subject[1] may give rise?

My paper, as read before the Royal Society, contained little more than the record of certain experiments connected with the isolation and pathogenic properties of certain organisms, but Mr. Malcolm objects to certain terms therein used.

He maintains that I have not proved that "malignant tumours" have been produced. What has been produced by the organisms in certain animals is this:—multiple tumours in various parts, and the death of the animal. I think that the term "malignant tumours" is an accurate one for this set of conditions.

Mr. Malcolm says that I asserted that I had obtained "pure cultures of parasites standing in causal relationship to cancer." I did not assert anything of the kind. I stated the fact that I had obtained a pure culture of an organism from a cancer, which organism was pathogenic to animals; and I also previously stated that I, in common with Metchnikoff, Ruffer, and others, *regarded* as parasites standing in causal relationship to the disease certain cell-inclusions which could be found in cancer.

Mr. Malcolm says that I do not state whether any tumours resulted from the experiments numbered 4 and 5 in my paper. It seems obvious in a summary of experiments on a certain subject that if there had been any results I should have recorded them, and that no mention would imply absence of results, as was the case with the two experiments in question.

In reference to Mr. Malcolm's second paragraph the growths produced in the peritoneum were certainly not carcinomatous; how could they be? They consisted principally of endothelial cells, as did also those in the lungs.

With regard to the corneal experiments referred to in his third paragraph, all I can say is that after 48 hours the epithelium had proliferated considerably and had dipped down into the subjacent tissues. I showed also at the Royal Society, a slide of a cornea five to six days after inoculation, in which the epithelium had burrowed into the deeper layers of the cornea for a considerable distance in all directions from the point of inoculation. This does not happen in the control experiments I have made in which no organisms have been used.

Mr. Malcolm begs the question when he says that I believe that the organisms are capable of inducing cancer. I have nowhere stated so; I cannot yet tell, as the matter is still in the experimental stage and my communication to the Royal Society was only a preliminary record of certain results obtained up to the present time.

With regard to the fourth paragraph in Mr. Malcolm's letter the culture used was, as stated in the third section of my paper, isolated from the case there mentioned.

The conclusions which Mr. Malcolm hints that I have too confidently adopted are quite logically deducible from the experiments which I have described. That I have used the word "tumours" is true, but it seemed to me to be the least objectionable word to adopt; and I think that new formations, occurring as swellings or lumps in places where there should be none and visible withal to the naked eye, may fairly be so called. That such tumours, or new growths, were produced is certain; that they were structurally endotheliomata in the peritoneum and lung is also certain; and that in the cornea the new growth was epithelial is also certain. Consisting as they did, then, of endothelial cells in the one case, and of epithelial cells in the other, they could hardly be called "inflammatory," unless this word is used in the sense of meaning certain specific phenomena of resistance, in which case cancer itself may, I think, be called "inflammatory."

I am, Sirs, yours faithfully,

H. G. PLIMMER.

St. John's Wood-road, N.W., April 4th, 1899.

[1] THE LANCET, March 25th, 1899.

## "THE HEALTHIEST CITY IN THE WORLD."

*To the Editors of* THE LANCET.

SIRS,—Under the above title in THE LANCET of April 1st Dr. Benjafield of Hobart, Tasmania, has given some interesting particulars of the health of Hobart and has thrown down a challenge. He will find that although the health of Hobart is apparently very good many English towns can easily beat it. In Eastbourne, for instance, the population of which last year was 5000 larger than that of Hobart, the total deaths were 68 less than the deaths of Hobart, the death-rate being 10·8 per 1000 instead of the 14·0 of which Dr. Benjafield is proud. For the year 1897 the death-rate of Eastbourne was under 10 per 1000, each of the above rates being inclusive of every death—visitors, workhouse, and hospitals included. With regard to the special challenge of Dr. Benjafield as to deaths under 65 years of age it is impossible to ascertain the death-rates at various ages without knowing exactly the population at various ages as well as the number of deaths. He divides his total death-rate of 14 exactly into two unequal portions as being the death-rates above and below 65 years of age. This does not give a correct death-rate in any way. It is obvious that if, to take an extreme case, nine-tenths of his people were over 65 years of age, whereas only one-tenth of our people were over 65 years of age, his total number of deaths below 65 years of age might be very minute compared with ours, while the rates might be very much the reverse. His challenge cannot therefore be taken up on his present figures; the death-rates for persons over and under 65 years of age respectively must be calculated on the numbers living in the respective age groups and not by simply dividing the total rate.

I am, Sirs, yours faithfully,

W. G. WILLOUGHBY, M.D. Lond.,
Medical Officer of Health.

Town Hall, Eastbourne, April 2nd, 1899.

## SUDDEN DEATH: NO INQUEST.

*To the Editors of* THE LANCET.

SIRS,—At 3.45 P.M. on March 30th a man stopped my carriage in the street asking me to go to a house within a quarter of a mile to see a woman who had fallen down in a supposed fit. I went straightway and found a woman dead on the floor. Apparently there was nothing to account for death. I was told that she had not complained of illness, nor had she been seen by any medical man previously. Information was at once sent to the coroner, but on the morning of March 31st I was informed that he did not consider an inquest necessary. To this moment I have no idea of the cause of death in this case.

I am, Sirs, yours faithfully,

THOS. ALPH. BUCK, M.B. Lond.,
Surgeon to the Royal Isle of Wight Infirmary and
Ryde, April 3rd, 1899. County Hospital.

*** It must be remembered that a coroner's duty is not only to hold inquests but also to decide if they ought to be held. We must suppose, therefore, that the coroner in this case was put in possession of private information enabling him to be certain that the death followed upon natural causes. It is a little difficult to conjecture what this information could have been, while from our correspondent's statement the absence of an inquest is simply astounding.—ED. L.

## THE IRISH MEDICAL ASSOCIATION.

*To the Editors of* THE LANCET.

SIRS,—It has been arranged that the *annual* meeting of the Association shall be held for this year in Cork, and it appears to be in contemplation that, at least in each alternate succeeding year, the *annual* general meeting shall be similarly held in Belfast, Galway, and other provincial centres. It is known to the Association in Dublin and Cork, and probably elsewhere, that I am strongly opposed to this new departure, and, as I feel that my action in the matter may be misinterpreted by the members of the Association in a sense unfavourable to me I beg your permission to give my reasons. Before doing so I desire to say that, so far from wishing to throw cold water on any effort of my provincial brethren to organise

among themselves for their own protection and for the good of the profession and the public I heartily welcome their zeal and am ready to cooperate with them and to urge the Association to do so. That I have always been anxious to encourage them in taking the reins of the Association into their own hands and in availing themselves of a predominant influence in its work is testified by the fact that it was I who in May, 1890, designed the new constitution of the Association which transferred the ruling power to elected councillors, two-thirds of whom are provincialists, and it has always been a source of regret and disappointment to me that they have to a great extent failed to avail themselves of the powers thus conferred on them. I therefore warmly advocate the holding of a general meeting once each year in each provincial centre which expresses its willingness to receive the Association and to make arrangements to do honour to the guests, and I do not think that the influence of the Association or its funds could be applied to a better use than assisting such an enterprise. Yet I am totally averse from the proposition that Cork, Belfast, or any other city shall withdraw from Dublin the annual general meeting heretofore held on the first Monday in June in Dublin and I shall give my reasons.

First, I object emphatically to a breach of the custom which has governed the Association for 61 years. The first Monday in June was for excellent reasons selected, at the foundation of the Society in 1839, by Carmichael, Kingsley, Benson, Jacob, and others of its founders, and as there is not another professional organisation in the kingdom which can boast of such a tradition I should like to maintain it even if the specified date were inconvenient. Secondly, the date named was fixed because on it a gathering of the professional clans took place, and still takes place, in Dublin to assist in the elections at the College of Surgeons and in the annual general meeting of the Royal Medical Benevolent Fund Society. If the day is appropriated for a provincial meeting the simple result will be that the practitioners interested in these functions will be absent from such meeting, including the majority of the metropolitan men. Thirdly, it has always been the custom of the Association to remind the heads of departments, Members of Parliament, and other distinguished persons, as well as the Dublin Press, of the existence of the organisation by holding a public dinner to which these high functionaries were invited either officially by the Association or by members as their guests, and I maintain that the custom was very necessary to the well-being of the organisation. Needless to say that if the annual meeting in Dublin is abolished the Association will be "lost to sight, to memory dear," as far as these potential influences are concerned.

For these reasons I urge that the provincialists should be content with a well-organised public meeting at any other time of the year—to which meeting the parent Association should send delegates and contribute money, but that it should not interfere with the time-honoured annual general meeting, from which, as I assert, we have gained substantial consolidation in the past. From the last report of the Association I find that Dublin contributes nearly thrice as many members as any county in Ireland, very many of them being men who lend their names and their money without any personal interest whatever in the work of the Association. Are we going to discourage that interest by taking away the one annual chance which is afforded to them to acquaint themselves with our work.

I am, Sirs, yours truly,

ARCHIBALD HAMILTON JACOB, M.D.T.C.D.,
F.R.C.S. Irel.,
Ex-President and Councillor, Irish Medical Association.

April 5th, 1899.

## "DIFFICULTIES UNDER THE NEW VACCINATION ACT."

*To the Editors of* THE LANCET.

SIRS,—"Hon. Sec. Plaistow Medical Society" holds curious views on persuasion. He thinks that he can persuade most parents by threatening them with the public vaccinator with his four insertions and with the law as embodied in an independent vaccination officer. It reminds one of the way they persuaded Hooligan's mule. "They coaxed it with a crowbar till the poor old mule was sore." This new "duty" of calling on the public and pressing professional services on them with these new weapons of persuasion will surely not be accepted by the majority of private practitioners.

If I might venture to criticise the action of the body of which he is the honorary secretary it seems a strange outcome of a discussion on the new Vaccination Act to pass a resolution practically condemning the four insertions with glycerinated lymph. Had the learned society nothing to say of the conscientious objector (often a parent who knows nothing of vaccination but who is on bad terms with the public vaccinator and cannot or will not pay for private vaccination)? Does it approve of highly trained medical men paying 1*s.* visits and calling on all sorts and conditions of men with offers of professional services? Are we to understand that the persuasion theories emanate from the society? Secretaries are not supposed to write their private views over their official signature.

Personally I fail to see how the new Act will secure efficient vaccination. The Government dared not insert a clause fixing the minimum of efficient vaccination for they feared the homœopaths, and they dared not make vaccination really compulsory for fear of the anti-vaccinator. The only man whom they do not fear is the qualified medical practitioner, who will, they think, do anything for a fee. The result is that they have attempted to throw the whole of the unpleasant part of the work on him. He is to call on careless or unwilling parents to "persuade" them to have their children vaccinated and upon him they will probably try to throw the blame when small-pox sweeps over unvaccinated England. We ought to repudiate the duty now and throw the responsibility back on the parents who are the proper persons to bear it. We have said what should be done and we are willing to do it, but it is going too far to hire us at 1*s.* a visit to "persuade" the public and so make us act in a way which is inconsistent with the dignity of our profession.

I am, Sirs, yours faithfully,

April 3rd, 1899. P. P.

## NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

*Death of Major Evans, I.M.S.—The Plague in Calcutta, Bombay, and Karachi.—Hong-Kong again Declared Infected.—The Plague Commission.*

I REGRET to record the death in Calcutta from plague of Major Evans, I.M.S. He was resident physician and professor of pathology at the Medical College. The deceased officer was extremely popular in his service and an additional sadness is lent to his untimely death by the fact that he was shortly to proceed home on leave after a spell of seven years on active duty.

Plague seems to be steadily on the increase in Calcutta and the outbreak is developing very differently to that of last year. Great consternation prevails and further special medical assistance is being obtained from Bombay. In Bombay City 2312 deaths were registered for the past week, as against 2431 for the week previously, the normal number being about 513. There being only 1074 admitted cases of plague the excess of deaths over the normal means the successful concealment and false registration of over 800 cases. The type of plague is still very bad and the percentage of mortality is very high. The death-rate for Bombay was 143·57 per 1000 per annum on the census (1891) population of 821,764.

In consequence of the prevalence of plague in Karachi the local Government has notified the Province of Sind to be a suspected area. At Karachi they are adopting again the system of detaining passengers at Malir except those proceeding on business or who can be relied on to give an account of their movements.

The chief plague authority of Poona city has issued a notice to the effect that segregation of persons from infected houses has been stopped. Such persons will be kept three days under observation and allowed to re-occupy their houses after they have been thoroughly disinfected. There seem to have been more changes in plague regulations at Poona than at any other place in the Presidency and this last move places reliance solely on disinfection which has seemed to fail over and over again in destroying the infection of plague-stricken houses.

The authorities at Lorenzo Marquez forbade the landing

of Bombay deck passengers on the steamer *Courland* which was compelled to return to Zanzibar. The present outlook in the Punjab plague-infected area is considered very unsatisfactory. Arrangements which were in force last year for the protection of Simla against plague are about to be re-introduced. There will be railway and road inspections at Tara, Devi, Tarvi, and Mashobra. Plague at Vellore in the Madras Presidency is increasing and great fears are now entertained that the disease will spread before long to Madras city.

The returns of plague for the Bombay Presidency show an increase of 258 cases and of 293 deaths, the cases being 3090 as against 2832 last week and the deaths 2585 as against 2292. Increases are reported in Bombay city, Karachi, Surat, Thana, Sholapur, Ahmednagar, Ratnagiri, and in the native states of Cutch and Baroda. The inspecting officers at the various railway inspecting stations discovered 33 cases.

Five cases of plague are reported from Hong-Kong and the Venice Convention regulations will be imposed against Hong-Kong at Aden and ports in the Bombay Presidency and Sind.

The Plague Commission have returned to Bombay and will continue to take evidence until their departure by the *Arabia* on March 25th.—Dr. Mullunnah of Hyderabad was again examined on the experiments performed at Hyderabad and expressed his dissent from some of the statements made by Lieutenant-Colonel Lawrie, I.M.S. He did not think that the putrefactive and other organisms found in the fluid which they first received belonged to it but were the result of contamination. He contradicted the statement which had been made public that the bacillus of plague had been found by him in a sample of raw cotton.—Captain Johnson had done inoculations with Haffkine's fluid after it had been resterilised and the results were much more satisfactory.—Colonel Robertson, Resident of Mysore, said that the policy of administration was that when a case was discovered the house was marked and the people were persuaded to vacate it and it was then disinfected. The people for the most part slept on the floors. Plague spread slowly, it did not jump from one place to another.—Khan Bahadur B. B. Patel, J.P., said that in his district there were about 8000 Parsees. His experience was that rats were found dead in the majority of cases preceding the incidence of plague amongst the human inhabitants and that cases of plague generally followed in houses where dead rats were found. Those living in good well-ventilated houses usually escaped even if dead rats had been discovered. Those who left their houses invariably escaped. In answer to the question whether plague was contagious the witness said that he had seen people sitting in close proximity to plague patients and hugging and kissing them and yet had not noticed a single instance where such people had been subsequently affected by plague. He did not believe that plague was contagious. In his experience not a single case of plague had occurred amongst the Parsees who were inoculated.—Sardar Khan Bahadur M. Yakub (deputy-collector, Sind) said that houses in which there had been plague in one year were found to be more liable to plague in the second epidemic than other houses. As a rule houses with earth floors suffered more than houses with paved floors.—Dr. Cayley, divisional health officer, gave the results of the examination of the sputum in cases of primary and secondary plague pneumonia. In the early stages of primary pneumonia the sputum contained practically pure cultures of plague bacilli. Bacilli had been found in the throat several days after the temperature had returned to normal. In secondary pneumonia plague bacilli were found in the majority of cases and were present for from five to 14 days after the onset of lung symptoms. Plague bacilli were not found in perspirations or scrapings from the surface of the skin. He had not succeeded in finding the bacillus in graveyards or the floors of houses. In one case it was found in a piece of matting on which a plague patient had been lying and which was soaked with discharges.—Major Crimmin, I.M.S., V C., port health officer, said the inspection of all vessels leaving Bombay harbour commenced on Jan. 1st, 1897. Up to date 162,064 vessels of all kinds arriving and leaving had been inspected and a total of 2,870,454 crew and passengers. There had been 374 cases of plague discovered. The incubation period of plague appeared to be from three to five days. The clothing and bedding of native crews bound to ports out of India were now disinfected by steam before the vessel left the harbour.—Mr. Du Boulay, the Deputy Municipal Commissioner, said that the medical men sometimes did not report cases of plague and kept secrecy about them. The voluntary workers employed on inspection, the friends, neighbours, and relatives of the patient were the sources of information of cases. They always persuaded people to go to hospital and he did not know of any case where force had been employed. Those in a moribund condition were left in their houses. He admitted that removal of patients to hospitals led to opposition and the hiding of cases. It would be impossible to isolate patients in the big chawls. When a moribund case was found they supplied the people with disinfectants. It was not practicable for their staff to go there and disinfect the walls and floors periodically. It would create opposition. When they removed patients they disinfected the rooms. Whenever death occurred from any cause the medical officer of the district visited the house and made inquiries.

The Government bacteriologist has issued a report on experiments conducted in the Mysore Mines. He says that the ordinary non-spore-bearing bacteria do not flourish in the soil in large numbers. Two samples of soil at depths of 1400 and 1620 feet contained four different kinds of bacilli but no cocci. The absence of cocci showed that delicate non-spore-bearing bacilli like those of plague cannot flourish in underground soil. The soil of the Ooregaum Mine is reported to have contained a large number of bacilli and cocci and appeared to be a good medium for the growth and propagation of plague-like bacilli. His experiments on cockroaches lead him to state that there is no reason to apprehend that they would be any source of danger even if the mines became infected with plague. The cyanide tailings showed no bacteria when artificially infected with the plague microbe. All the plague bacilli died on the second day, this being due to the absence of organic matter upon which bacilli could live.

In answer to the applications from Natal and Mauritius for plague specialists the Government of India have appointed Captain Leumann, I.M.S., for the former place and Lieutenant J. S. Stevenson, I.M.S., for the latter. Both officers have had considerable experience with regard to plague.

## MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

*Explosion of Ether at the Rochdale Workhouse.*

THE adjourned inquest on the bodies of the two nurses who were killed by the explosion of ether at the Rochdale Workhouse on March 14th was held on March 29th before Mr. Molesworth, the county coroner. It may be remembered that the inquiry was adjourned in the hope that Nurse Barker might be able to give evidence, but unhappily she also has succumbed to her injuries. Three bottles of ether were supplied to the workhouse the day before the accident by a druggist at Littleborough who had them from a firm in Manchester. A representative of this firm said that the explosion could not have taken place at the instant the bottle was broken. Ether vapour was very heavy and would sink and then travel along the ground to the fireplace and an explosion would then follow and the room would be filled with one sheet of flame. Dr. William Pinck, the medical officer to the workhouse, stated that he was not aware before the accident that there were three bottles of ether in the cupboard of the surgery," and that when they were received they ought to have been taken to the store in another part of the building. The superintendent nurse, Miss Evans, was not well on the day on which the ether was received and probably Nurse Barker put them in the cupboard as she was next in charge. She told Dr. Pinck that she lifted the first bottle by the neck and showed it to Miss Evans. Her words as reported were: "In attempting to put it back I knocked it against another bottle and broke it and all fell down on to the ledge below. Instantly there was a flame." Dr. Pinck thought that ether ought not to be kept in large quantities in such bottles. The jury returned a verdict of "Accidental death," and recommended that ether should be kept in stronger bottles and placed under the Petroleum Act; and further, that there should be "a better system adopted at the Rochdale Workhouse of receiving medical drugs." No explanation was given in the report of the fact that the superintendent nurse seems practically to have had charge of the surgery or any statement made as to how and by whom the dispensing of the medicines for the inmates was carried out. This unhappy

fatality is worth recording as it may lead to more care being taken in other workhouses where matters may be a little lax and where, as at Rochdale, "there should be a better system ..... of receiving medical drugs."

*The Manchester Corporation and the Infirmary Site.*

Slowly, but whether surely or not time will show, steps are being taken to bring together representatives of the Manchester Corporation and of the trustees of the Manchester Royal Infirmary to discuss the question of the sale of the infirmary site to the corporation. On March 29th there was a meeting of the Special Committee of the corporation which was appointed with reference to this question. It was presided over by Sir John Harwood and the position of affairs was discussed at great length with the result that a small sub-committee was appointed and authorised to meet a similar number of representatives of the infirmary with the object of preparing a scheme which, it is to be hoped, will prove acceptable to both sides. Now that the Ship Canal has turned the corner and entered on what may with great probability be expected—an era of prosperity—the City Fathers may look to the future with less anxiety than they have felt for some years past. No doubt it would be an immense advantage on numerous grounds for the city itself to possess its finest site and also for the infirmary to be taken more into the outskirts, and the time seems almost ripe for the fulfilment of what has been talked of for so many years.

*Paraffin Lamp Accidents.*

An inquest was held on April 3rd at Altrincham touching the death of a little girl, two years of age, who died from burns received through the explosion of a paraffin lamp. She had pulled the table cloth and with it the lamp to the ground. The room was set on fire and the child was severely burned on the body and all her clothing was burnt. A fall from the table to the floor would be a severe test for any lamp. A juror asked if there was no possibility of improving this class of lamp—no doubt a cheap common lamp—so as to prevent these accidents. He also said that a receiver of copper was far better than one of brass. He had known one of brass to explode. Inexpensive extinguishers have been devised and put on the market, but have not come into general use. Views as to the proper degree for the flash-point seem influenced by trade interests, but all will agree that if possible lamps should be made safe, so that they would not explode and that if upset the flame would be extinguished. The coroner expressed "a hope that in the interests of the poorer classes there would be legislation on the subject."

*The Drowning of an Owens College Student.*

An inquest was held on April 3rd at Port Erin on the body of Mr. E. T. Townsend, a student of medicine at Owens College. He went out with a friend for the purpose of "tow netting" in "a frail wooden square-bottom boat the property of the Liverpool Marine Biological Station at Port Erin." When returning to the shore the boat capsized and Mr. Townsend was drowned. He was a young man of much ability and it is melancholy to think of a valuable and promising life being lost when, according to the verdict, it need not have been. The verdict of course was "Accidental death," but the jury added a rider to the effect that the boat was totally unfit to have been used by inexperienced persons.

*New Cottage Hospital at Colne.*

On April 1st the foundation-stone of a cottage hospital for the borough of Colne was laid by Mr. W. P. Hartley of Aintree. It was decided last year to build a cottage hospital in celebration of the Jubilee and Mr. Hartley, a native of the town, offered to build one at an estimated cost of £4000 on condition that £4000 more were subscribed as an endowment fund. The offer was accepted. At the ceremony of stone-laying he offered £1000 more if the public would raise the endowment fund to £5000, and no doubt this will be done.

April 4th.

## SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

*The Registrar-General's Annual Report on the Births, Marriages, and Deaths in Scotland.*

DURING 1898 130,879 births were recorded, being 308 per 10,000 of the estimated population, or 3·08 per cent. There were registered during the year 78,486 deaths in Scotland, the death-rate being 184 in every 10,000 of its estimated population, or 1·84 per cent. The highest number of deaths was registered in the month of April, when they amounted to 8248. As regards the vaccination of children the returns for 1897 show that of the 129,014 children whose births were recorded in Scotland 108,378, or 84·005 per cent., were successfully vaccinated. Certificates of postponement were granted in 2945 cases, or in 2·283 per cent.; 569, or 0·441 per cent. were stated to have been insusceptible to vaccination from some constitutional peculiarity; one, or 0·001 per cent., from having had small-pox; and 255, or 0·197 per cent., were insusceptible from previous vaccination by persons who were not qualified to grant certificates to that effect. Of the children born 13,552, or 10·504 per cent., died before being vaccinated and 3314, or 2·569 per cent., were removed from the district in which they were born or were unaccounted for for some other reason. By comparing these statistics with those of the previous 10 years it appears that the number successfully vaccinated is below the average of the previous 10 years, the proportion of postponed cases is above the average, the number constitutionally insusceptible is above the average, the number insusceptible from previous vaccination is below the average, the number who died before vaccination is above the average, as also is the number unaccounted for.

*University of St. Andrews.*

At the half-yearly meeting of the General Council of St. Andrews University held on March 30th a motion was adopted to the effect that further action with respect to the draft ordinances providing Berry chairs of Anatomy and Physiology should be postponed, and that the teaching requisite for two *anni medici* should be continued for two sessions longer than at present arranged for.

At a meeting of the University Court held on March 31st Mr. A. T. Masterman, B.A., D.Sc., was appointed lecturer on Embryology. It was resolved to afford assistance to Professor Marshall to enable him to teach Materia Medica in St. Andrews in the summer session. Mr. R. S. Mowat, M.B., C.M. Edin., was appointed assistant to the lecturer on Medical Jurisprudence and Public Health in University College, Dundee, and Mr. H. Llewellyn Heath, L.S.A., assistant to the professor of Materia Medica. Protests by St. Andrews medical professors and lecturers against the holding of meetings of the medical faculty, &c., at University College were allowed to lie on the table. The Court approved of two clauses recommended by the General Medical Council for the amendment of the provisions of the Medical Acts as to the penal and disciplinary powers over graduates.

*Aberdeen University.*

The number of medical students who have completed the final professional examination at this time—all under "new regulations"—is 25. In connexion with the graduation ceremony which takes place on Friday, April 7th, it has been arranged to have an anthropological exhibition, for which loan collections relative to New Guinea and Fiji have been sent by Sir W. Macgregor, Governor of Lagos, late Administrator of New Guinea, and Colonel Allardyce of Aberdeen. Sir W. Macgregor, who is a medical graduate of Aberdeen University, has also given to his *alma mater* a number of specimens to form the nucleus of an anthropological museum. For the year ended Sept. 15th last the total income of the general fund of the University amounted to £14,024 and the expenditure to £13,803, leaving a balance of £221. At date of balance the liabilities under the head of "University Buildings Extension" stood at £15,549 17*s.* 4*d.* There are 69 candidates for the medical preliminary examinations of this week.

*Aberdeen and Vaccination.*

With reference to the recent resolution of the Aberdeen Parish Council as to the enforcement of the Vaccination (Scotland) Acts, the Scotch Local Government Board replied that no guarantee as to the purity of glycerinated calf-lymph could be given except the *ipso facto* one that it was issued from the central institution and making intimation that the Board insist that the law relating to vaccination must be carried out in Aberdeen, and requesting that the parish council consider the whole question of proceeding against defaulters and send a definite answer to the Board's instructions within a week from March 24th. The parish council met on March 31st to consider this communication. A discussion took place and there were proposed various motions, including one that the Board's instructions be carried out *simpliciter*. Ultimately the

parish council, by the casting vote of the chairman, adopted a resolution to the effect that—"This council will use the most careful discrimination where they relax the strict letter of the law in any case brought before them."

*New Hospital at Braemar.*

The Deeside District Committee of the Aberdeen County Council have entered into contracts for the erection of an isolation hospital with three wards and other accommodation at the village of Braemar in the Deeside Highlands.

April 4th.

## IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

*The New Rules of the Local Government Board of Ireland in Reference to Nursing in Irish Workhouse Hospitals.*

THE dissatisfaction with the new rules in reference to trained nurses which was alluded to last week by your Belfast correspondent in connexion with the meeting in Londonderry is by no means confined to the north of Ireland. Letters of complaint have appeared from all districts, the latest news on the subject coming from Gorey, in which town the board of guardians met on April 4th under the presidency of the Earl of Courtown for the purpose of appointing a trained night nurse for the workhouse infirmary. It was found, however, that there were no applications for the position although the guardians had advertised repeatedly during the past few months. Several members of the board are reported to have expressed their high indignation at the action of the Local Government Board in refusing to sanction even the temporary appointment of an untrained nurse. The retrospective action of the new rules has caused much difficulty. Hitherto a trained nurse has been understood in Ireland to be a person who has received systematic training in a large clinical hospital under the supervision of a highly-trained lady superintendent for one year, who has passed the examination for nurses of the medical board, and who has before receiving her certificate been engaged in private nursing in connexion with the nursing home of the hospital for two other years. The Local Government Board, following the rule which prevails in Scotland, now insists on a minimum training of three years. Even the *Irish Times*, the most loyal of Irish newspapers, in a leading article on March 7th wrote: "To insist now, as the Board are about to do, upon a minimum training of three years and to make any such rule retrospective appears to us to be going much too far." On the other hand, Dr. Moorhead of Cootehill, who has done so much to improve the condition of Irish workhouse infirmaries, wrote in the same journal on March 24th, and after mentioning some of the well-known causes why there are so few applicants of a high-class type for the post of workhouse hospital nurse went on to say: "I, however, do not agree with those who think this a sufficient reason for lowering the standard of education which the Local Government Board have laid down. It is the standard required by the Scottish Local Government Board for workhouse hospital nurses in that country and having been found suitable there should be equally so here."

*The Tralee Board of Guardians and Nurses in Union Hospitals.*

The recent circular of the Local Government Board directing boards of guardians to appoint in future as nurses for workhouse hospitals only such persons as have been regularly trained has met with some opposition, principally owing to the increased expenditure involved. At the last meeting of the Tralee Board of Guardians the circular was under discussion and objections to it were raised on other grounds. The nursing at the local union hospital has heretofore been done by nuns—the Sisters of Mercy. Six of the sisterhood are engaged in that duty. Four are paid £20 a year each by the guardians and the services of the other two are given gratuitously. The medical officer reported that further assistance would be required and the guardians proposed to employ another Sister of Mercy, but the Local Government Board refused to sanction the appointment unless it could be shown that the sister had gone through the course of training prescribed by the Board's circular. Several of the guardians laid stress on the value of the religious ministrations of the nuns to the Roman Catholic patients who form the great majority of the inmates of the hospital. It was also stated that nuns would have more influence than lay nurses in maintaining discipline. One of the speakers mentioned that two of the Sisters of Mercy in the establishment have been nursing during the past 27 years, and he urged that the services of intelligent ladies with such large experience ought to be as valuable as those of lay trained nurses who may have only completed their period of probation. Two of the Protestant guardians present spoke in eulogistic terms of the manner in which the hospital had been managed, and a resolution was unanimously adopted requesting the Local Government Board to reconsider their decision. To the ordinary medical mind the desire of the Local Government Board to provide trained nurses in every instance for patients in union hospitals has everything to commend it and it would be regrettable in the extreme if anything were successful in thwarting the benevolent intentions which dictated the issuing of the circular. But we must not close our eyes to facts and there is no doubt that a large volume of public opinion in Ireland is in favour of retaining the services of the Sisters of Mercy in those unions where they have been acting as nurses. If the Local Government Board should yield to public opinion it might be considered that they would have no excuse for making different sets of rules for different unions. But it might fairly be conceded that the system which has been in vogue for years has given to the Sisters of Mercy certain vested rights, and recognising the fact that expediency often demands that great reforms should be introduced gradually the Local Government Board might be well advised if whilst carrying out their rule as far as possible they were to fix a time limit after which they would decisively refuse to recognise any nurse, whether belonging to a religious order or not, unless she could produce satisfactory evidence that she had gone through the prescribed course of systematic hospital training.

*Dublin Public Health Committee.*

The usual meeting of the Public Health Committee took place on March 30th, when it appeared that the zymotic death-rate was exceptionally low. The committee adopted the suggestion of Sir Charles Cameron to forward to the Premier, in view of further legislation, the following recommendations contained in a paper by Mr. R. J. Downes, President of the Pharmaceutical Society of Ireland, relative to the distribution of poisons, which was read before the Public Health Congress:—

(*a*) That "wholesale dealing" should be defined as (1) a sale to a person qualified to sell by retail; (2) a sale to a manufacturer for use in the process of his business; and (3) a sale to public bodies who usually buy by contract. (*b*) That the principle of qualification of the proprietor should not be departed from. (*c*) That "poisonous substances" recognised to be poison should be added to the poison schedule. (*d*) That potent and seductive poisons in prescriptions should not be repeated except by the special direction of the prescriber. (*e*) That poisons may not be kept or sold in the shop or room in which groceries and excisable liquors are sold or kept, or in bottles in common use for the containing of beverages. (*f*) That a legal as well as a moral obligation should rest on the public as to storing and distributing poisons.

*The Adelaide Hospital, Dublin.*

The annual meeting of the friends and supporters of the Adelaide Hospital took place on the afternoon of March 30th. Lord Iveagh presided and in his opening speech paid a generous compliment to the medical profession. In alluding to the amount of valuable time which hospital physicians and surgeons devoted to the service of the poor he mentioned that he himself was much struck some years ago by hearing from the late Sir Andrew Clark that his attendance in his hospital cost him more than £2000 a year. Dr. Wallace Beatty read the medical report and drew attention to the necessity for an increase in the accommodation of the out-patient department. Dr. Francis Heuston and Dr. J. W. Moore, the President of the Royal College of Physicians of Ireland, both spoke strongly in favour of the construction of a new and up-to-date operation theatre.

*The Death-rate of Belfast.*

The Registrar-General of Ireland, Dr. Thomas Grimshaw, has intimated in a letter to the Lord Mayor of Belfast that he has given directions for the adoption of the figures 350,000 (instead of as formerly 308,960) as the basis for the calculation of the rates for vital statistics. It is probable that the population of Belfast is even higher than these figures.

*The Rainfall of 1899.*

During March the rainfall, as taken at Seaforde,

co. Down, was 1·53 inches, which added to that previously registered for January and February (9·08 inches) makes a total of 10·61 inches for this year, as against 4·82 inches for the same three months in 1898. This year then has been so far twice as wet as 1898.

*Royal Victoria Hospital, Belfast.*

The first general meeting of the authorities of the Royal Victoria Hospital under the new charter was held on March 31st to elect 60 members to form that part of the general committee which is to consist of annual subscribers of two guineas. There were not that number present, so, as advised by their solicitor, it was decided that the report and statement of accounts for the four months ending Dec. 31st, 1898, is not at present required, but that in lieu thereof a report and statement of accounts for the 16 months ending Dec. 31st, 1899, should be submitted to the annual meeting to be held in the month of March, 1900. There is very considerable difference of opinion as to the qualification of the annual subscribers. According to the new charter it is to be not less than two guineas, while in the old state of affairs it was one guinea. Many people in Belfast hold that it would have been wiser to keep to the old qualification of one guinea. There are at present so many charities that people of limited means find that they must divide their subscriptions, and so they argue that instead of giving two guineas to one institution they will give one guinea each to two.

*The Water-supply of Belfast.*

The Belfast Water Commissioners, anxious to make their existing catchment areas as pure as possible, have been compelled to go to Parliament to obtain powers to purchase compulsorily the farms affecting these areas. This will entail the disturbance of about 1000 people who will be fairly compensated. As regards the great Mourne scheme the Commissioners have wisely purchased the whole catchment area, so that no one without their permission can live in it, and it is hoped that by next autumn some of this new Mourne water will be available. When this new scheme is finished it will settle the water-supply of Belfast for many years to come, and the Commissioners expect then to supply also to the city hydraulic power as is now done in Glasgow.

*Close of the Winter Medical Session, Belfast.*

The winter medical session at the Queen's College and the Clinical Hospital came to an end on March 28th. The summer session will begin on May 2nd, the Royal University examinations taking place largely in the interval.

*The Chair of Pathology at Glasgow University.*

Dr. J. Lorrain Smith, lecturer on pathology in Queen's College, Belfast, is a candidate for the vacant chair at the University of Glasgow.

April 5th.

## PARIS.

(FROM OUR OWN CORRESPONDENT.)

*Surgical Technique.*

AN important discussion took place upon March 22nd at the meeting of the Society of Surgery which gave an insight into the practice of some of the best known Paris surgeons as regards asepsis in operating. M. Quénu who opened the discussion gave it as his opinion that an aseptic condition of the surgeon's hands was the great thing to be aimed at, but that absolute asepsis is at present unattainable with the means at our disposal. The surgeon should therefore use every effort to avoid contact with septic material, for even repeated washings will not remove all traces of infection. Not only should the surgeon operate directly on his arrival at the hospital before touching any patient under his care, but he should also from the evening before abstain from any examination which might infect his fingers. In the opinion of M. Quénu gloves are of very real use and both he and his assistants use them in any septic operation or when there is any doubt as to the asepticity of their hands. A mask is useless, but if the surgeon has a cold or is suffering from dental periostitis he might make use of one or at least wash out his nose and mouth with some antiseptic solution previously to operating. Suture threads can be effectually sterilised in an autoclave, especially if care be taken to place in the autoclave together with the sutures some substance fusing at a temperature of 112° C. as a means of control. M. Quénu uses, almost exclusively, as material for sutures ordinary flax thread which is tolerated by the tissues just as well as silk and is more resistant. It acts very well in tying the uterine arteries and in cases of hernia and gastro-enterostomy. As a matter of principle the finer the thread used for sutures the better it is tolerated by the tissues. Except in the case of gastro- or entero-intestinal anastomoses where the overhand (*surjet*) suture is used, M. Quénu always makes use of the interrupted suture. Finally, the less the quantity of tissue comprised in the ligature or suture the better the chance of success. Out of 237 cases of severe operations—such as those for gastro-enterostomy, acute appendicitis, choledochotomy, hydatid cysts of the liver, purulent peritonitis, salpingitis, and nephrectomy—M. Quénu has had, owing to the precautions taken, only 13 deaths, or a mortality of 5 per cent. M. Bazy, who spoke after M. Quénu, had a different tale to tell, and he related the case of a laparotomy which he had performed with perfect success on the day after he had had septic operations or examinations to carry out—such as, for instance, a rectal examination for cancer or Estlander's operation. M. Tuffier agreed with M. Quénu that complete asepsis of the hands was impossible to obtain. Among the methods of as far as possible eliminating infection from the hands he mentioned the importance of never allowing septic products to dry on the hands. With regard to gloves M. Tuffier had used them for three months. They were of the same kind as those used by M. Quénu and they came from Leipsic, but it was not to be doubted that they very much diminished the delicacy of the touch and it was difficult when wearing them to guide an instrument safely in a deep wound. He only used them for septic operations. He did not consider flax thread so suitable for sutures as did M. Quénu, for it did not knot so easily as silk. To insure good primary union all bleeding must be staunched before sewing up the wound, for the smallest blood-clot formed an admirable culture medium for pathogenic organisms. M. Jalaguier has employed since 1887 indiarubber gloves on account of the intolerance of the skin of his hands to every kind of antiseptic solution, and he also has noticed loss of delicacy in his touch. For sutures he uses catgut. M. Poirier uses indiarubber gloves, not for the operation itself but on the day previous for one or two hours, so as to provoke profuse perspiration which flushes out the pores of the skin and so extrudes sundry organisms.

*The Effects of Operation on the Mentally Unsound.*

At the meeting of the Society of Surgery held on March 29th M. Picqué reminded the members that by means of some former researches he had been enabled to state that operations on the genital organs in women had no influence upon the appearance of mental disturbance. After a study of this question for a period of 12 years M. Picqué has now taken up that of the results of operations in women with a view to the cure of mental disturbances. The surgical treatment of mental disease has for some time past occupied the attention of surgeons in foreign countries and has been for the most part vehemently opposed, while plenty of statistics have been adduced to show that surgical intervention in lunatics is useless. M. Picqué, however, does not consider that it is fair to class all these results under one heading. On the contrary, he thinks that in well-selected cases an operation is quite capable of restoring a lunatic to sanity and bodily health. Of course, not every form of mental alienation is amenable to treatment and it is equally absurd to try to bring about a cure by taking away healthy organs. M. Picqué lays stress upon the frequency with which gynæcological affections are found in lunatics. Statistics show that such affections occur in the proportions of 60, 80, or even 93 per cent. M. Picqué himself puts the figure at 88 per cent. In his opinion mental afflictions are capable of cure to a much greater degree than is at present supposed. Many practitioners are opposed to all forms of intervention in such cases, but M. Picqué considers them to have been led astray by not leaving out of their calculations epileptic and hysterical patients, in whom surgical interference should be strictly avoided. M. Picqué has collected 66 cases, and he divides them into three groups—first, patients in whom the mental disturbance showed itself together with disease of the generative system, some of the patients being aware of the existence of

this disease and others in ignorance of it; secondly, sexual hypochondriacs who had become so after the appearance of their mental derangement; and thirdly, those convalescent from mental disturbance but whose complete recovery was retarded by some affection of the generative system. As for those suffering from persecution mania, general paralysis, or hysteria M. Picqué declined altogether to interfere with them. He had examined 63 female patients in an asylum and found that only seven were absolutely sound as regarded their generative system. He had operated in 18 cases and had met with 11 absolute successes, three improvements, three cases were neither benefited nor made worse, and one patient died. The three cases remaining stationary were those of two hysterical women and one suffering from persecution mania, two classes of patients on whom M. Picqué never operates now. He had treated four other patients, giving in all 12 cured, six improved, three remaining stationary, and one who died. In conclusion he said that patients must be carefully chosen; there must be some definite lesion to justify operation and in such cases it will often be found that the result will be a return to sanity.

April 3rd.

## BERLIN.

(FROM OUR OWN CORRESPONDENT.)

*Urban Death-rates.*

AN essay on the mortality of several of the larger towns of Germany has been published by Dr. Dreifuss of Ottweiler (Rhenish Prussia) in the *Vierteljahrsschrift für Gerichtliche Medicin*. The author on examining the death-rates of Berlin, Munich, Nuremberg, Strassburg, Frankfort, Elberfeld, and Danzig has found that there has been a considerable decrease within the last 30 years. Improved hygienic and social conditions are held to be the cause of this satisfactory result. The report states that small-pox has been comparatively seldom met with since 1874 when vaccination was made compulsory; the few cases observed since that year occurred almost exclusively in foreigners coming from countries without compulsory vaccination. Enteric fever has also been less frequent, in consequence, it is supposed, of the suppression of private slaughter-houses and the establishment of large public slaughter-houses provided with modern hygienic arrangements. The workmen's insurance laws have had a very good effect in diminishing tuberculosis by compelling the wage-earning classes to join sick clubs, and thereby putting them in the way of taking better care of their health and providing them with medical attendance and nursing at an early stage when tuberculosis is not yet incurable. The mortality from diphtheria has decreased considerably, but Dr. Dreifuss is far from attributing this fact to the anti-diphtheritic serum alone. Without pronouncing an emphatic opinion he points out that there were occasional periods of nearly the same low death-rate long before the antitoxin era. The death-rate from puerperal fever has decreased astonishingly in lying-in hospitals, obstetrical clinics, &c., whilst in cases attended at home the reduction of the mortality has not been very remarkable, the explanation being that many of the midwives, especially the older ones, are not sufficiently trained in antiseptic methods. Finally the report states that the death-rate of those towns which had a very high mortality 30 years ago is diminished considerably at the present time, whilst in those places where public health was fairly good 30 years ago the subsequent improvement is less remarkable. The differences between the towns are at the present time much less pronounced than they were 30 years ago.

*Yeast in the Treatment of Blennorrhœa.*

A new treatment for vaginal blennorrhœa is described by Dr. Landau in the *Deutsche Medicinische Wochenschrift*. His object was to discover a method which without being deleterious to the patient would nevertheless be capable of destroying gonococci and their toxic products. In his experiments he acted upon the principle of substituting for the gonococci cultures of other micro-organisms of a greater vitality and power of propagation and he found that common yeast fulfilled these requirements. Of 40 cases treated in this way the blennorrhœa was completely cured in more than half, sometimes even after only one or two applications. In a second series temporary relief was effected, but the blennorrhœa reappeared; in a third series the catarrhal affection was diminished; and in a few cases there was no apparent improvement although the patients declared that they felt better. The yeast was obtained from a brewery and after being diluted with a small quantity of beer was injected into the vagina with an ordinary syringe and retained by a tampon closing the orifice of the canal. The injection was repeated after two or three days and the treatment was continued for several weeks.

*A Nursing Exhibition.*

An exhibition of apparatus and appliances used in the nursing of patients is being arranged for by a committee under the honorary presidency of Dr. Bosse, Minister of Public Instruction, the active President being Dr. von Leyden, Professor of Clinical Medicine in the University of Berlin. The exhibition will be in connexion with the Congress on Tuberculosis, to which allusion was made in my letter published in THE LANCET of March 11th (page 730), and it will be open from May 10th to June 18th. The committee consists of leading hospital physicians and surgeons, army medical officers, and sanitarians. The exhibition will be divided into two departments—one general and one special. The first or general department will comprise models of sick-rooms, apparatus for heating, ventilation, and disinfection, beds, food for invalids, baths, wearing apparel, and books on nursing; the second or special department will comprise apparatus and appliances for the nursing of tuberculous patients, of sick children, of surgical patients, of the inmates of lunatic asylums, and of women in childbed; there will also be a section for nursing in time of war and in the colonies. Such of the objects exhibited as possess exceptional importance or interest will be kept together so as to form a permanent museum of nursing.

*The Treatment of Tuberculosis.*

In the *Münchener Medicinische Wochenschrift* Professor Hoffa draws attention to the treatment of tuberculous affections of the bones, joints, glands, and skin by inunctions of soft soap, a method which he has applied during the last 12 years in more than 200 cases. Other means, such as injections of iodoform, plaster bandages, &c., must of course not be neglected, but he found them more efficacious when they were combined with the use of soap. The patients' general state and appetite improved and multiple tuberculous affections of the bones and joints healed completely. It is essential to use a very good quality of soap, of which from 25 to 40 grammes are rubbed on the body from the neck to the thighs two or three times a week. After 15 minutes the soap may be wiped off. The inunction is most conveniently done in the evening, as the patient ought to remain in bed for some hours afterwards. The soap is said to act by its strong alkalinity, for on becoming absorbed it neutralises the lactic acid of the organism, the increased alkalinity of the blood stimulates metabolism, and in this way improves the general nutrition. An increased quantity of urine is passed during the treatment. A great advantage of this method is its cheapness which makes it specially useful for poor persons for whom good food, sea air, and other therapeutical resources are not available.

April 3rd.

## ROME.

(FROM OUR OWN CORRESPONDENT.)

*Palermo.*

THE true friends of Italy are not those who shut their eyes to the "prosaic reality" of her condition while flattering her *amour propre* by dwelling on her glorious past and the romantic interest which clings to her even yet, but those who are at pains to show her where her strength and her weakness lie and to put her on lines by which she may multiply the one and minimise the other. THE LANCET has always tried to perform this latter rôle and in a series of articles, the result of prolonged and diligent investigation, has proved the splendid resources which she possessed in the North Sicilian Riviera—particularly in its beautifully-situated, naturally-favoured, but hygienically backward city, Palermo.[1] Once and again it has recalled her attention to the subject, and as recently as Feb. 18th last, in a leading article entitled

[1] THE LANCET, May 29th and June 5th and 12th, 1897.

"Italy's Opportunity," indicated afresh the advantages still open to her in North Sicily, even in view of the steady determination of invalid travel to Egypt and the Nile. It is somewhat disheartening, therefore, to read in the principal Palermitan organ, the *Giornale di Sicilia*, that the drinking-water lately conducted from the fine source at Scillato has, on reaching the city, been found to be so polluted that the Director of the Board of Municipal Hygiene has had to intervene. Analyses thereupon instituted have disclosed in the said water "un contenuto batterico esorbitante" (excessive bacterial impregnation). Inquiring how this could have been possible after the electric light of world-wide publicity had been thrown on Palermo and its sanitary condition I receive the following in reply: "The report on the expenditure incurred for the resanitation of our city reveals the discreditable fact that of the 30,000,000 lire (£1,200,000) accorded by loan to Palermo already 19,500,000 have gone and that of these only 11,000,000 (£440,000) have been devoted to their legitimate object—the sanitary rehabilitation of the city. The other 8,500,000," adds my correspondent, "were squandered in directions quite extraneous to the purpose for which they were borrowed." A very painful impression has in consequence been produced—all the more that the Palermitan Town Council, being "in tristi condizioni finanziarie" (deplorable impecuniosity), is constrained to reduce the remaining sanitary works to a minimum. The late Agostino Bertani, the great Genoese surgeon and director-in-chief of ambulances in the successive Garibaldian campaigns, whose last work was his bestowal on the kingdom of its "Codice Sanitario," once exclaimed to me after a discussion on the Italian outlook, "Oh Italy, Italy!" That was 25 years ago, and after a quarter of a century the above information just received from Palermo makes me echo the bitter cry of my patriot friend.

*The Red Cross Afloat.*

Let me touch on a theme less unwelcome to lovers of Italy—her coöperation in the Red Cross movement which owes its inception to one of her medical sons, Dr. Palasciano, who first proposed such an organisation in Sicily during one of King Bomba's raids on his own liege subjects. Year by year she is striving to perfect her system of "relief to the wounded in time of war," and during the disastrous Abyssinian campaign of March, 1896, her Red Cross contingents supplied the one redeeming feature amid the general *débâcle*. From autumn to autumn she signalises the military manœuvres by some improvement, often as effective as it is ingenious, in the Red Cross service, and this year, on the occasion of the extensive evolutions of the army in the Alta Italia, she proposes to lay under contribution the *ospedali galleggianti* (floating hospitals) the "perfectioning" of which she has long been engaged upon. The lakes, with their affluent and effluent waters, connected as these are with the great network of artificial irrigation in the Lombardo-Venetian territory form an admirable area for this novel and picturesque adjunct to Red Cross resources; and from the development of the system, after its preliminary trials some years ago culminating in the exhibition at Milan, there is every reason to expect that it will more than justify the anticipations of its promoters. In the great autumnal heat and dust of the Lombard plain in which the manœuvres are to come off the very thought of a floating sanitary service on lake and waterway has something in it delightfully cool and refreshing. The operations will be under the direction of the *Ispettore-Capo* (inspector-in-chief of the services), Dr. Paolo Postemski, *privat-docent* in special pathology and surgery in the Roman School, whose work in Abyssinia in conjunction with the great orthopædist, Invernizzi, in rehabilitating the mutilated Ascars forms a bright page in the annals of humanitarian surgery.

*Professor Koch's Resumption of his "Malarial" Studies.*

About the middle of this month Professor Koch returns to Italy to complete his investigations into the etiology, the clinical history, the treatment, and the prophylaxis of the so-called "malarial poison." He will be accompanied, as he was last autumn, by his able coadjutors Dr Pfeiffer and Dr. Kossel and will visit the chief "foci" of the disease. These will include the island of Sardinia, the Tuscan Maremma, the Pomptine Marshes, and the Maremma Ferrarese. His headquarters will be in Rome where his experiments will be conducted as before in the "Laboratorio Governativo d'Igiene." The Government (I am officially informed) will in every way facilitate the researches of its illustrious guest, placing at his disposal all requisites in *matériel* and *personnel*.

*Nemesis!*

The Turinese Town Council, on the advice of its hygienic officers, used to publish the names and addresses of the dealers whose unsound articles of food had been impounded in the interests of the consumer. That salutary regulation it has lately dropped and now I hear of alarming cases of poisoning in the subalpine capital due to the sale and ingestion of "funghi avvelenati" (poisonous mushrooms). Extensive seizures of the incriminated fungi have in consequence been effected, to be followed, it is to be hoped, by a return to the due "advertisement" of the nefarious vendors.

*Leo XIII. and Professor Mazzoni.*

In acknowledgment of Professor Mazzoni's services during his recent illness the Pope has presented that eminent surgeon with a gold ring studded with brilliants, accompanying the gift with an autograph letter in the language of his Church.

Easter Eve.

## VIENNA.

(FROM OUR OWN CORRESPONDENT.)

*Congress of Internal Medicine.*

THE Sixteenth Congress of Internal Medicine will be held this year from April 11th to 14th at Carlsbad, the well-known health resort. The introductory address will be delivered by Professor Quincke of Kiel. Two meetings of the congress will be devoted to discussion. At the first a discussion on Insufficiency of the Heart Muscle will be opened by Professor L. von Schroetter (Vienna) and Professor Martius (Rostock); at the second a discussion on Leukæmia and Leucocytosis will be opened by Professor Loewit (Innsbruck) and Professor von Minkowski (Strasburg). One meeting will be reserved for demonstrations and four other meetings will be available for the numerous papers to be read, of which 49 have been announced up to the present. It is hoped that the famous Austrian watering-place will attract many visitors to the congress.

*Massage in Hungary.*

The Hungarian Minister of the Interior has issued an order by which the practice of massage by non-medical persons is greatly restricted. Such persons are prohibited from carrying out massage treatment of patients except under the supervision of a medical man who takes the responsibility; and they are furthermore prohibited from practising massage of the abdominal or sexual organs or the eyes. Contraventions of this order will be punished by imprisonment and by a fine of 100 gulden (about £9 10*s*.).

*The late Outbreak of Plague.*

Last week some anxiety was occasioned in Vienna by a newspaper report stating that a servant at the bacteriological laboratory of the General Hospital had been taken ill and had been isolated. Various rumours soon spread through the city and people became anxious lest a fresh outbreak of plague had occurred at the laboratory; but the matter was explained satisfactorily in a few hours. Since the outbreak of plague last autumn everybody working in the bacteriological section of the laboratory when attacked by any febrile disease is kept under constant medical observation and is isolated in a special part of the hospital. The patient whose case attracted attention last week exhibited febrile symptoms, but his illness proved to be a simple gastric catarrh and his isolation was discontinued on the next day.

*Hyperidrosis Spinalis Superior.*

At a recent meeting of the Vienna Gesellschaft der Aerzte Professor Kaposi showed a case of hyperidrosis spinalis superior in a boy, 15 years of age. Increased perspiration of the face was noticeable even in the first years of the patient's life and for the last seven years there was marked hyperidrosis of the face, head, and trunk down to the sixth rib as well as of the arm down to the carpus. He perspired copiously in these regions of the body in cold weather, but the perspiration was less marked in summer and after much walking or other bodily exercises it stopped. It was observed that exposure to cold produced copious perspiration even though only a part of the body—one arm, for example—was slightly cooled by contact with cold air or by water, while the attacks of

hyperidrosis, which lasted often for two hours, could be easily stopped by putting the patient into a warm bath. Professor Kaposi expressed the opinion that in this case, which was combined with kyphoscoliosis, the attacks were due to spinal disease, probably hydromyelia.

April 3rd.

# Obituary.

## JOHN BRUNTON, M.D. GLASG.

ON March 25th Dr. John Brunton died very suddenly at his residence, 16, Endsleigh-street, London, aged 63 years. On March 23rd, feeling somewhat unwell, he remained in bed, but on the following morning he was able to resume his work and to make his usual round of professional visits. After dinner he became suddenly unconscious and despite the loving care of his son, Dr. John Brunton, jun., and of his friend, Dr. Frederick Roberts of University College, he peacefully passed away at 6 P.M. on March 25th owing to cerebral hæmorrhage. Dr. Brunton's parents were well known and highly respected in the West of Scotland. His father, William Brunton, LL.D., adopted teaching as his profession and filled important posts at Coatbridge, Falkirk, Campbeltown, and lastly at Paisley where for upwards of 30 years he was rector of the grammar school. He was on terms of intimacy with Sir Walter Scott, Christopher North, and the "Ettrick Shepherd," and he died at the ripe old age of 83 years loved and revered by all who knew him. His eldest son John (the subject of this notice) was born at Campbeltown, Kintyre, on May 16th, 1835, and he received his education at the University of Glasgow where he graduated as B.A. in 1855, M.A. in 1856, and M.D. in 1860. His university career was in every way a brilliant one, for he not only highly distinguished himself as an art student but he carried off prizes in nearly every department of medical study, including chemistry, anatomy, physiology, practice of medicine, midwifery, and forensic medicine. After graduating in medicine he filled the posts of house surgeon and house physician at the Glasgow Royal Infirmary, subsequently studying medical practice at the principal schools on the Continent. Having made his home in London in 1862, his invariable self-denial and sympathy with others made him beloved by all with whom he came in contact, whether high or low, rich or poor. In this way he soon made for himself a large and extensive medical practice and a wide circle of friends. He filled numerous important public appointments in London, including that of medical adviser to various railway companies, surgeon under the Factories Act, &c., and he served as vice-president of the Obstetrical Society of London and of the Medical Society of London. Although always a busy man and having his hands full of professional work he found time for a good deal of writing, and he has from time to time published records of interesting cases met with in his own practice, including acute hydrocephalus, encysted placenta, pelvic hæmatoma, prolapse of the funis, and the treatment of nævus by ethylate of sodium. He was also the inventor of the otoscope. The high estimation in which he was held by his *alma mater* was testified by the fact of his having been retained as examiner for medical degrees in the University of Glasgow during the unusually long period of 12 years.

With a thorough knowledge of his profession Dr. Brunton possessed a large stock of common-sense which is frequently such a valuable adjunct to medical treatment. He was ever in sympathy with all that is true and noble in our profession and he never lost an opportunity of showing his abhorrence of anything savouring of baseness or quackery. His cheery expression and genial manner were the outcome of his habit of always looking upon the bright side of things instead of upon the gloomy one and his constant desire appeared to be to make the world around him happier and more contented than he found it. Amongst sportsmen he was well known as a keen angler and his holiday was never complete unless his fishing-rod accompanied him. He was a loving and devoted husband and father and a staunch friend. He leaves a widow and a grown-up family to mourn their loss.

## GEORGE CHARLES WALLICH, M.D., L.R.C.S. EDIN.,

SURGEON-MAJOR, INDIAN MEDICAL SERVICE (RETIRED).

SURGEON-MAJOR GEORGE CHARLES WALLICH, who died in his eighty-fourth year on March 31st, received his professional education at the University of Edinburgh, where he graduated as Doctor of Medicine in 1836. He became a Licentiate of the Royal College of Surgeons of Edinburgh in 1837 and in the following year he entered the Indian Medical Service. He served during the Sutlej campaign in 1842 and in the Punjab campaign in 1847, and on each occasion he was awarded a medal. He was Field-Surgeon during the Soutal Rebellion in 1855–56 and he retired from the service in 1858. In 1860 Dr. Wallich, on the recommendation of Sir Roderick Murchison and Professor Huxley, was attached as naturalist to H.M.S. *Bulldog* on her voyage across the Atlantic to survey the sea bottom for the laying of the proposed Atlantic cable. The materials obtained by the sounding operations were slender, but in working them out Dr. Wallich showed that he had already grasped all the principal problems of deep-sea research. His wide range of knowledge, the soundness and power of his reasoning, and his originality and independence of thought enabled him to establish beyond the possibility of doubt, and for the first time, the hitherto unknown fact that the bathymetrical limits of animal life in the ocean extended to the great depth of 7500 feet, or one mile and a half, beneath the surface.

For more than 20 years Dr. Wallich continued to work in the same line of inquiry and in investigating collateral subjects, notably the life-history, structure, and relationships of those unicellular organisms which play so important a part in pelagic and bathybial life and the lithological identity of the ancient chalk formation and of the calcareous deposits in the ocean at the present time. The Gold Medal of the Linnean Society of London was awarded to Dr. Wallich last year by the Council in recognition of his researches into the problems connected with bathybial and pelagic life, the Council being of opinion that such originality, accuracy, and keenness as an observer peculiarly fitted him for that honour.

Dr. Wallich was a Corresponding Member of the Royal Society of Liége. He was the author of "Notes on the Presence of Animal Life at Vast Depths in the Ocean" (1860), "The North Atlantic Sea-bed" (1862), and of numerous papers on the biology and distribution of the lower forms of animal and vegetable life. He contributed to the *Magazine of Natural History*, the *Quarterly Journal of Microscopical Science*, and various other scientific periodicals.

# Medical News.

**EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.**—The following gentlemen passed the Second Examination (Anatomy and Physiology) of the Board in the subjects indicated on Monday, April 3rd :—

Arnold Gregory, Yorkshire College, Leeds; Moses John Rowlands, David Haydn Evans, and Trevor Howell, University College, South Wales, Cardiff; Arthur Herbert Norris and Frank Forrest, Owens College, Manchester; John Welsh and Harry Pierpoint, University College, Liverpool; James Gilkison Higgins and John Leeming Stephenson, St. Mungo's College, Glasgow; John Hope Reford and John Alexander Douglas Radcliffe, Queen's College, Belfast; William Charles Bower, Medical College and University, Madras; Albert Ernest Henton, Edinburgh University and St. Mary's Hospital; Lewis William Huelin, St. Mary's Hospital; Charles Clement Drabble, Firth College, Sheffield; Joseph Ebenezer Adams and Mathias Wilhelm Eberhard Widegren, St. Thomas's Hospital.

*Anatomy only.*—Robert Alfred Pitter, Yorkshire College, Leeds; and Rowland Wilbraham Hill, Owens College, Manchester.

*Physiology only.*—John Marie Sloan Duncan, London Hospital; and John Philip Edmund Henery, St. George's Hospital.

22 gentlemen were referred in both subjects, one in Anatomy only, and one in Physiology only.

Tuesday, April 4th :

Arthur Ashmore, Yorkshire College, Leeds; John Milnes Pooley, John Lemon Martin, and John Herbert Wells, St. Mary's Hospital; Thomas Walter Scott and Evett Gordon Allport, Melbourne University; Stanley Child, Cambridge University and Guy's Hospital; Otto Charles Henry Leopold Moll, Durham University and Guy's Hospital and Mr. Cooke's School of Anatomy and Physiology; John Braithwaite, Gerald Wetherall Capon Hollist, and Harold Tipping, Guy's Hospital; Creswell Burrows, Walter Mersh Strong, and Robert Dixon Browne, Cambridge University and St. Thomas's Hospital; Herbert Melville Churchill, London

Hospital; Charles Rowan Hamilton Ball, Cambridge University and St. Bartholomew's Hospital; Gerald Sydney Ewen, St. Bartholomew's Hospital; James Evan Turle, University College, London; Matthew Robert Cecil MacWatters, King's College, London; Lionel Francis Lovell-Keays and Gerald Coneybeare Cross, Middlesex Hospital; Harold Ramsey Popham Baker, St. George's Hospital; and Eugene Christopher Whitehead, Westminster Hospital.
13 gentlemen were referred in both subjects.

Wednesday, April 5th:

Richard Ernest Howell Leach, Thomas Gibson, Harry William Sexton, and Tom Jays, St. Thomas's Hospital; Richard Coger Lawry, Percival Pasley Cole, William Watkin Cadwaladr Jones, Norris Norman Allen Houghton, Santiago Luis Pallant, and Charles Hy. Bubb, Guy's Hospital; Horace Arthur Cutler, Cambridge University and Guy's Hospital; John Corbin, St. Bartholomew's Hospital; Frank Powell Connor, Calcutta and St. Bartholomew's Hospital; George Frederic Gill, Otago University and St. Bartholomew's Hospital; Hugh Bernard Willoughby Smith, London Hospital; Percy George Reilly, London Hospital and Mr. Cooke's School of Anatomy and Physiology; Reginald H. Bernard Ellis Hughes, George Jewel Evans, and Francis Haylett Smith, St. Mary's Hospital; Thomas Miller Neatby, Lawrence Charles Hunt, and Stanley Parkes Mummery, St. George's Hospital; Wilfrid Boothby Blandy, Eric Bayley, and Faustin Marcel Boclet, Charing-cross Hospital; John Alexander Drake, King's College, London; and John Parker Ellerington and Harold Rundle FitzNettle, University College, London.
Eight gentlemen were referred in both subjects.

**VICTORIA UNIVERSITY.**—At the degree ceremony on March 29th the following candidates were presented:—

*Bachelor of Medicine and of Surgery.*—Second-class honours: John Craig, Wilfrid Henry Richardson, and Oswald Hampson Woodcock, Owens College.—John White Aldred, Owens College; Thomas Taylor Bark and John Turner Grierson, University College; Thomas Wheeler Hart and John Edridge Healey, Owens College; William Saville Henderson and John Edward Whitley McFall, University College; Thomas O'Neill, Owens College; John Arthur Reed, Yorkshire College; and Graham Renshaw, Owens College.

At the Second Examination held in March in the Faculty of Medicine the following candidates were successful:—

*A. Anatomy and Physiology.*—John Acomb, Yorkshire College; F. H. S. Ashworth, Owens College; Herbert Bates and J. L. Beddoes, University College; H. M. Birkett and J. W. H. Brown, Yorkshire College; Fred. Bullough, Owens College; W. H. Canter, Yorkshire College; J. B. Cook, J. F. Corson, J. M. Cort, E. N. Cunliffe, Tom Eastham, and J. E. Floyd, Owens College; J. A. C. Forsyth, Yorkshire College; H. E. Fox, Owens College; G. W. Gelderd, University College; D. G. Gellatly, Owens College; V. J. Glover, University College; P. H. Green and J. W. Greenwood, Owens College; Frederick Griffith, University College; W. S. Holmes, Owens College; W. L. Maccormac, Yorkshire College; Charles Mackey, Owens College; C. T. Matthews, Yorkshire College; J. S. W. Nuttall and T. F. Pugh, University College; Arthur Richmond, Owens College; Edwin Saville, Yorkshire College; F. R. Sawdon and G. H. Shaw, Owens College; Robert Smailes, Yorkshire College; *H. G. Tansley, H. C. Waterhouse, Alwyn Wharton, and B. M. Wilson, Owens College; F. P. Wilson, University College; and J. G. Woolham, Owens College.

*B. Materia Medica and Pharmacy.*—C. W. S. Boggs, Yorkshire College; S. B. Brentnall, Owens College; J. C. Caley, Yorkshire College; A. C. Clarke, Owens College; A. M. Deane and J. A. C. Forsyth, Yorkshire College; P. T. Harding, Owens College; J. L. Hawkes, University College; F. W. Hayes, Yorkshire College; G. R. Heath, Marshall Hooper, and S. B. Mehta, Owens College; J. B. O'Donoghue and M. B. Potts, Yorkshire College; S. W. Swindells, Owens College; and M. G. L. Walker and F. W. B. Young, Yorkshire College.
* Awarded University Scholarship.

**UNIVERSITY OF GLASGOW.**—The following have passed the third professional examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (P., Pathology; M., Medical Jurisprudence and Public Health):—

Matthew Aikman, M.A. (P.), George Arthur (P.,* M.), Gavin Barbour (P., M.), James Oastler Barclay (P., M.), Thomas Thomson Bathgate (P., M.), Alexander Binning (P.), Harry Egerton Brown (P., M.), William Herbert Brown (P.), John Douglas Brownlie (P.*), William Adam Burns (P., M.), Thomas Carruthers, M.A. (P., M.), Edward Provan Cathcart (P.), John Thomson Clark (P.,* M.), Robert Clark (P.), Charles Peter Garvie Crichton (P., M.), Charles Campbell Cuthbert, M.A. (P.,* M.), Archibald William Wallace Davidson (P.,* M.), David Cur Douglas (M.), John Downie (P.), Leonard Findlay (P.*), Alexander Fraser, M.A., (P.*), Matthew William Fraser (P., M.), Gilbert Garrey (P., M.), Edward Gillespie (P., M.), Hyam Goodman, M.A. (P., M.), Charles Aikman Gourlay, M.A. (P.), Charles Herbert Gunson (P.), Archibald Wilson Harrington (P., M.), James Macpherson Henry (P.), Isaac Mackay Huey (P., M.), Norman Maclean Leys (P., M.), James Dunlop Lickley (P.*), Donald M'Farlane Livingston (P.*), John Lockhart (P., M.), Alexander Logan (P.), Davin Dale Logan (P., M.), Robert Lunan (P., M.), Jacob Mains (P.), Andrew Mair (P.*), Robert M'Nab Marshall (P.), Allan Martin, M.A., B.Sc. (P.), James Millar, M.A. (P., M.), Norman M'Leod Miller (P., M.), Peter Moir (P. M.), Daniel Morrison (M.), Alexander Munro (P.), Anderson Gray M'Kendrick (M.), George Steventon M'Kinnon (P.), James Mackinnon (P.), Alfred Robert Maclurkin (P., M.), Burgess M'Phee (P., M.), Duncan Mackenzie MacRae, M.A. (P., M.), Thomas Neill (P., M.), William Barr Inglis Pollock (P.*), Peter Mackenzie Reid (P.), John Duncan Richmond (P., M.*), David Russell (P.), James Scott, M.A. (M.), Edgar William Sharp (P., M.), James Shearer (P., M.), David Ap Simon (P.), John Strathearn (P., M.), Robert Taylor (P., M.), James Cameron Turnbull (P.), George White (P.*), Alexander Wilson (M.*), Thomas Watson Wilson (P., M.), Hugh Patrick Wright (P.), and John Young (P.*).
Women.—Auguste Boyes (P., M.), Gertrude Jane Campbell (P., M.), Lila Stephenson Greig (P.*), Mary Forbes Liston (P.,* M.), Jean Marion Farie Marshall (P., M.), Karen Margrethe Myhre (P.), and Christian Cleland Wood Smith (P., M.).
* Passed with distinction.

The following have passed the Second Professional Examination for the degrees of Bachelor of Medicine (M.B.) and Master in Surgery (C.M.):—

Robert Cumming, B.D., George Wardlaw Milne, and Alexander M'Donald Nevin.

The following have passed the Third Professional Examination (Regional Anatomy and Materia Medica) for the Degrees of Bachelor of Medicine (M.B.) and Master in Surgery (C.M.):—

Thomas Holmes and James Duncan Wilson.

**PROPOSED HOME FOR INCURABLES AT PLYMOUTH.**—At an influential meeting held at Plymouth on March 29th it was decided to establish a home for incurable patients at Plymouth; and a committee was appointed to prepare a scheme for the purpose to be submitted to a public meeting to be held shortly.

**DR. A. PATTON** who has for over 25 years been medical superintendent of Farnham House Asylum, Finglas, Dublin, having retired from the management of that institution, one of the oldest of its class in the kingdom, is succeeded by Dr. W. R. Dawson who has for some years been his colleague in the asylum and was formerly assistant medical officer at Morningside Asylum.

**MEDICAL MAGISTRATES.**—The following appointments as magistrates have been made for the colony of New South Wales: Mr. G. V. Gilray, M.B. Edin., of Nyngau; Mr. R. H. Todd, M.D. Dub., F.R.C.S. Irel., of Sydney; and Mr. Donald Luker, M.B., Sydney, has been appointed Deputy Licensing Magistrate of the Licensing Court for the Licensing District of Brewarrina.

**ROYAL COLLEGE OF SURGEONS IN IRELAND.**—The following is the prize list for the winter session 1898–99. Descriptive Anatomy: Junior—Mr. J. Cockburn, first prize (£3) and medal; and Mr. R. G. Allen, second prize (£1) and certificate. Senior—Mr. A. Charles, first prize (£3) and medal; and Mr. T. A. Dillon, second prize (£1) and certificate. Practical Anatomy: First year—Mr. R. G. Allen, first prize (£3) and medal; and Mr. R. W. Burkitt, second prize (£1) and certificate. Second year—Mr. A. Charles, first prize (£3) and medal; and Mr. C. W. Ewing, second prize (£1) and certificate. Third year—Mr. C. R. Boyce, first prize (£3) and medal; and Mr. J. F. Peart, second prize (£1) and certificate. Practice of Medicine: Mr. J. P. Byrne, first prize (£3) and medal; and Mr. T. J. Tallon, second prize (£1) and certificate. Surgery: Mr. J. S. P. Stewart, first prize (£3) and medal; and Mr. J. P. Byrne and Mr. W. R. Meredith (equal) second prize (£1) and certificate. Midwifery: Mrs. H. L. Hennessy, first prize (£3) and medal; and Mr. J. S. P. Stewart, second prize (£1) and certificate. Physiology: Miss M. J. Shire, first prize (£3) and medal; and Mr. A. Charles, second prize (£1) and certificate. Chemistry: Mr. T. Keogh, first prize (£3) and medal; and Mr. G. G. Tabuteau, second prize (£1) and certificate. Pathology: Mr. J. F. Peart, first prize (£3) and medal; and Mr. H. Grabb, second prize (£1) and certificate. Physics: Mr. W. Ormsby, first prize (£3) and medal; and Mr. A. Ellenbogen, second prize (£1) and certificate. The summer session will commence on Monday, April 10th.

**PRESENTATIONS TO MEDICAL MEN.** — On March 20th, at the Moss-street Schools, Blackburn, the students of the ambulance class presented Mr. J. W. LAX, L.R.C.P., L.R.C.S. Edin., of Whalley New-road, with a walking-stick in recognition of his services as lecturer.—On March 14th a large assemblage from Sharnbrook and representatives from the district met in the Schoolroom, Sharnbrook, to present Mr. C. Hicks, L.R.C.P. & S. Edin., &c., on the occasion of his leaving the neighbourhood, with two silver-plated entrée dishes, a large silver-plated soup tureen, together with a hunting crop with silver mounts, the soup tureen bearing this inscription: "Presented to Charles Hicks, Esq., L.R.C.S., by the inhabitants of Bolnhurst, Bletsoe, Felmersham, Knotting, Milton Ernest, Pavenham, Odell, Riseley, Sharnbrook, Souldrop, Thurleigh, and Wymington, as a token of their hearty appreciation of services rendered with great skill, assiduity, and kindness."—

On the closing of the Dalmellington Ambulance Class on March 23rd, which had been conducted during the winter months by Mr. R. S. Dunlop, M.B. Edin., the lecturer was presented with a silver tea-kettle as a token of the members' appreciation of his services as instructor.

# Parliamentary Intelligence.

## NOTES ON CURRENT TOPICS.

*University Degrees Bill.*

AGAINST the second reading of this measure General Laurie has put down the following amendment—viz.: "That this House declines to place a stigma on foreign and colonial universities by enacting that any graduate or holder of a degree of such university shall be required to append to his name the title of such university while graduates of universities in the United Kingdom are exempted from such requirement."

*Lead Poisoning.*

When the House of Commons meets on Monday, April 10th, Mr. McKenna will ask the Home Secretary whether his attention has been called to the conclusions arrived at by Professor Thorpe and Professor Oliver in their report on Lead Compounds in Pottery and whether in view of these conclusions the Factory and Workshop Bill will contain provisions for prohibiting the use of lead for glazing earthenware in those particular kinds of ware in which it has been proved to be unnecessary, for prescribing the use of lead in the form of a fritted double silicate, for prohibiting the use of raw lead, and for prohibiting the employment of young persons and women as dippers, dipper assistants, ware cleaners after dippers, and glost placers in factories where lead-glaze is used.

*Butter and Margarine.*

In the Committee stage of the Sale of Food and Drugs Bill Sir Charles Cameron proposes to move to repeal Subsection 3 of the Margarine Act, 1887, and in lieu thereof to enact as follows:—"The word margarine shall mean all substances, whether compounds or not, prepared in imitation of butter and containing not more than 10 per cent. of butter fat, and no such substance shall be lawfully sold except under the name of margarine; but nothing in the Margarine Act, as amended by this Act, shall be held to prohibit the sale of any admixture of margarine with butter in any proportion above 10 per cent. of butter as a mixture of margarine and butter, provided it be sold as such and provided that every provision of the Margarine Act, as amended by this Act, as to branding or marking of cans or the lettering of wrapping papers in which margarine is sold, shall apply, *mutatis mutandis*, to the sale of any such admixture of margarine with butter."

## BOOKS, ETC., RECEIVED.

BAILLIÈRE, TINDALL, AND COX, King William-street, Strand, London.

On Retro-peritoneal Hernia: being the "Arris and Gale" Lectures. By B. G. A. Moynihan, M.S. Lond., F.R.C.S. Eng. 1899. Price 7*s.* 6*d.*

The Analysis of Food and Drugs. By T. H. Pearmain and C. G. Moor, M.A. Cantab. Part II. The Chemical and Biological Analysis of Water. 1899. Price 5*s.* net.

BAUERMEISTER, F., Glasgow.

Jahresbericht über Fortschritte auf dem Gebiete der Chirurgie. Von Prof. Dr. Hildebrand, in Berlin. III. Jahrgang. Bericht über das Jahr 1897. 1898.

BLAKISTON'S, P., SON, AND CO., Walnut-street, Philadelphia.

Diagnosis by the Urine. By A. Memminger, M.D. Second edition. Illustrated. 1899.

CHURCHILL, J. & A., Great Marlborough-street, London.

The Diseases of Children. By J. F. Goodhart, M.D. Aberd., F.R.C.P. Sixth edition. With the assistance of G. F. Still, M.A., M.D., M.R.C.P. 1899. Price 10*s.* 6*d.*

GRIFFIN, CHARLES, AND CO., Exeter-street, Strand, London.

Practical Sanitation. By G. Reid, M.D., D.P.H., with an appendix on Sanitary Law by H. Manley, M.B. Cantab., D.P.H. Fifth edition. Illustrated. 1899. Price 6*s.*

KIMPTON, H., 82, High Holborn, London.

Elements of Alkaloidal Ætiology. By A. M. Brown, M.D. 1899. Price 2*s.* 6*d.* net.

LANE, JOHN, London.

Professor Hieronimus. Translated from the Danish of Amalie Skram. By Alice Stronach and G. B. Jacobi. 1899. Price 6*s.*

LAYTON, C. AND E., Farringdon-street, London.

On Centenarians and the Duration of the Human Race. By F. E. Young, B.A., F.R.A.S. 1899.

LIPPINCOTT, J. B., Co., Southampton-street, Covent-garden, London.

An Experimental Research into Surgical Shock: An Essay awarded the Cartwright Prize for 1897. By G. W. Crile, A.M., M.D., Ph.D. Price 12*s.* 6*d.*

LIVINGSTONE, E. AND S., Teviot-place, Edinburgh.

Posological Tables: Appendix on Poisons; Index of Diseases. By Wm. Craig, M.D., C.M., F.R.S.E. New edition. 1899. Price 1*s.* net.

The Student's Practical Materia Medica. By Grace H. Giffen, L.R.C.P., L.R.C.S. Edin. 1899. Price 2*s.* net.

MACMILLAN AND CO., London.

The Foundations of Zoology. By William K. Brooks, Ph.D., LL.D. 1899. Price 10*s.* 6*d.*

MEDICAL PUBLISHING COMPANY, Bartholomew Close, London.

On Villous Growths and the Common Affections of the Rectum. By Thos. Bryant, M.Ch. (Hon.), F.R.C.S. Eng. and Irel. (Hon.). 1899. Illustrated. Price 3*s.* 6*d.*

REBMAN PUBLISHING COMPANY, Shaftesbury-avenue, London.

Archives of the Roentgen Ray. Edited by T. Moore, F.R.C.S., and E. Payne, M.A. Cantab. February, 1899. Vol. iii., No. 3. 1899. Price 4*s.* net.

RICHARDS, GRANT, Henrietta-street, Covent-garden, London.

The Effects of the Factory System. By Allen Clarke. Revised edition. 1899.

A Tabulation of the Factory Laws of European Countries. By Emma Brooke. 1898.

SMITH, ELDER, AND CO., Waterloo-place, London.

The Hunterian Oration, 1899. By Sir W. MacCormac, Bart., K.C.V.O. 1899.

Dictionary of National Biography. Edited by Sidney Lee. Vol. lviii. Ubaldini—Wakefield. 1899. Price 15*s.* net.

STEINHEIL, G., Paris.

Les Voies Centrales de la Sensibilité Générale. Etude Anatomo-clinique. Par Dr. E. Long. 1899.

SWAN SONNENSCHEIN AND CO., London.

The Plague in India: An Impeachment and an Appeal. By C. Godfrey Gümpel. 1899. Price 2*s.*

Text-book of the Embryology of Invertebrates. By Dr. R. Korschelt and Dr. K. Heider. Translated from the German by Matilda Bernard and revised and edited by M. F. Woodward. Vol. ii. 1899. Price 12*s.*

SWEET AND MAXWELL, Chancery-lane, London.

The Law of Inebriate Reformatories and Retreats. By Wyatt Paine, Barrister-at-law. 1899. Price 6*s.*

WRIGHT, JOHN, AND CO., Bristol.

The Medical Annual and Practitioner's Index for 1899. Seventeenth year. Price 7*s.* 6*d.* net.

Magazines, &c., for April: Strand Magazine, Boy's Own Paper, Girl's Own Paper, Leisure Hour, Sunday at Home, Ludgate Magazine, Westminster Review, Contemporary Review, Friendly Greetings, Myra's Journal, Pall Mall Magazine, Windsor Magazine, Cornhill Magazine, Blackwood's Magazine, Pearson's Magazine, English Illustrated Magazine, Knowledge, Humanitarian, St. Peter's Magazine, New Century Review, The Captain, North American Review.

# Appointments.

*Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to* THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

ANDERSON, A. C., M.B., C.M. Edin., has been appointed Assistant House Surgeon to the Taunton and Somerset Hospital.

ANDERSON, A. J., M.B., C.M. Edin., has been appointed Medical Officer for the Workhouse of the Staines Union.

ASPINWALL, J. F., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Marsden Sanitary District of the Huddersfield Union.

BACK, A. H., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer for the Acle Sanitary District of the Blofield Union.

BARKER, W. H., L.R.C.P. Edin., M.R.C.S., has been appointed Acting Medical Superintendent, Ararat Lunatic Asylum, Victoria, Australia, vice W. B. Smith.

BARRETT, E., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Maxey Sanitary District of the Peterborough Union.

BENNETT, F. G., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed, *pro. tem.*, Acting Officer of Health for Albertonshire, Victoria, Australia.

BENNETT, W. G., L.R.C.P. Lond., M.R.C.S., has been appointed Public Vaccinator for Worcester Union, vice T. P. Gosling.

BOND, F. T., M.D. Lond., M.R.C.S., has been re-appointed Medical Officer of Health for the Cirencester Rural District Council.

BROWNLEE, JOHN, M.A., M.D. Glasg., D.P.H. Camb., has been appointed Medical Officer of Health for the Island of Guernsey.

BOUTFLOWER, ANDREW, M.R.C.S., has been appointed Honorary Surgeon to the Chetham Hospital, Manchester, vice F. A. Heath.

CADMAN, A. W., F.R.C.S., has been appointed Lecturer on Applied Anatomy in King's College, London.

COANE, JAMES, L.R.C.P. Edin., L.R.C.S. Irel., has been appointed Officer of Health for Yackandandahshire, Victoria, Australia, vice A. Mueller.

DAWSON, W. R., M.D. Dubl., M.R.C.P. Irel., has been appointed Medical Superintendent, Farnham House Asylum, Finglas, Dublin.

DERAVIN, H. A., M.B., Ch.B. Melb., has been appointed, *pro. tem.*, Acting Officer of Health for Inglewood Borough, Victoria, Australia.

DICKSON, W., M.B., C.M. Edin., has been appointed Public Vaccinator for the Hungerford Sanitary District.

DUNBAR, A., M.B., C.M. Edin., has been appointed Medical Officer for the Acomb Sanitary District of the Great Ouseburn Union.

FAUSSETT, H. J., M.D. Dubl., M.Ch., has been re-appointed Medical Officer of Health by the Tamworth Rural District Council.

FLOWER, FREDERICK, M.R.C.S., L.S.A., has been re-appointed Medical Officer for the Corsley District by the Warminster Board of Guardians.

GOODWYN, HENRY, L.R.C.P., L.R.C.S. Edin., has been re-appointed Medical Officer for the Islington Sanitary District of the Newton Abbot Union.

GRIMBLY, R. H., M.R.C.S., has been re-appointed Medical Officer for the Ipplepen Sanitary District of the Newton Abbot Union.

HOARE, MORLEY, L.R.C.P., L.R.C.S., L.F.P.S.G., has been appointed Clinical Assistant to the Birmingham and Midland Hospital for Skin and Urinary Diseases.

HORN, ARTHUR E., B.Sc. Lond., M.R.C.S., L.R.C.P., has been appointed Assistant Medical Officer to the Chelsea Infirmary, S.W.

HOSEGOOD, SAMUEL, M.R.C.S., L.S.A. Lond., has been appointed Medical Officer to the Swinton and Clifton District of the Barton-upon-Irwell Union, vice John Williams, deceased.

KELYNACK, T. N., M.D. Vict., M.R.C.P. Lond., has been appointed Honorary Pathologist to the Manchester Clinical Hospital for Women and Children.

LIVERSIDGE, WILLIAM, M.B. Lond., M.R.C.S., L.R.C.P. Lond., has been appointed Senior House Surgeon at the Blackburn and East Lancashire Infirmary, vice Robert Y. Aitken, resigned.

MACKIE, FREDERICK PERCIVAL, L.R.C.P. Lond., M.R.C.S., has been appointed Resident Medical Officer to the Ham-green Fever Hospitals and the Bristol City Hospitals.

MCCLEAN, JOHN F., M.R.C.S., L.R.C.P., has been appointed Surgeon Superintendent of the British Hospital, Constantinople, vice J. Patterson, resigned.

PARRY, W. H., M.B., C.M. Glasg., has been appointed Medical Officer for the Workhouse and Bettws-y-Coed and Trefriw Sanitary District of the Llanrwst Union.

RABY, LEONARD, M.D. Durh., M.R.C.S., L.S.A., has been appointed Medical Officer of Health for Devizes, vice E. N. Carless, deceased.

RUTTER, F. B., M.D. Durh., F.R.C.S. Eng., L.R.C.P. Lond., has been appointed Medical Officer for the Workhouse and the First Sanitary District of the Mere Union.

SMITH, J. M., M.D. Glasg., D.P.H. Edin., has been appointed Parochial Medical Officer by the Dundonald Parish Council, vice W. Alexander.

SOUTHEY, A. J., M.R.C.S., has been re-appointed Medical of Health by the Eton Urban District Council.

TINSLEY, S., L.F.P.S. Glasg., has been appointed Medical Officer for the Huggate Sanitary District of the Pocklington Union.

WILSON, A. C. J., L.R.C.P. Edin., M.R.C.S., has been re-appointed Medical Officer of Health by the Thurlstone Urban District Council.

WRIGLEY, R., M.R.C.S., has been re-appointed Medical Officer for the Bure Sanitary District of the Flegg Union.

# Vacancies.

*For further Information regarding each vacancy reference should be made to the advertisement (see Index).*

ASTON UNION.—Resident Assistant Medical Officer at the Workhouse, Gravelly-hill, near Birmingham. Salary £100 per annum, with furnished apartments, rations, washing, &c. Subject to statutory deduction. Apply to the Clerk to the Guardians, Union Offices, Vauxhall-road, Birmingham.

BATH EASTERN DISPENSARY.—Resident Medical Practitioner. Salary £100 a year, with furnished apartments, coals, gas, and attendance. Applications to Colonel F. V. Eyre, Hon. Sec., Rockville, Lansdown, Bath.

BIRMINGHAM AND MIDLAND EAR AND THROAT HOSPITAL, Edmund-street, Birmingham.—House Surgeon for six months. Salary at the rate of £42 per annum, with board, lodging, and washing.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Junior House Surgeon. Salary to commence at £60 per annum, with board, washing, lodging, &c. Apply to the Secretary, 15, Richmond-terrace, Blackburn.

BOROUGH HOSPITAL, Birkenhead.—Junior House Surgeon. Salary £75 per annum, with board and lodging, but no wine, spirits, or beer.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's-inn-road, W.C.—House Surgeon. Residence, board, &c., in the hospital.

DARLINGTON HOSPITAL AND DISPENSARY.—House Surgeon, unmarried. Salary £140 per annum, with rooms in the institution, but applicant to board himself.

DRIFFIELD UNION.—Medical Officer for Weaverthorpe District of the Union. Salary £21 per annum, with certain extra fees.—Apply to the Clerk to the Guardians, Driffield.

GENERAL HOSPITAL, Nottingham.—Assistant House Physician for twelve months. Salary £50, with board, lodging, and washing in the hospital.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, London.—Assistant Anæsthetist for six months. Salary at the rate of £10 10s. Also Surgeon to the Out-patients.

HARRIS PARISH COUNCIL.—Medical Officer and Public Vaccinator for the Southern Division of Harris. Salary £90. Other emoluments. Apply to Mr. T. Wilson, Solicitor, Lochmaddy, Clerk.

HEIGHAM HALL ASYLUM, Norwich.—Assistant Medical Officer.

HOSPITAL FOR WOMEN AND CHILDREN, Leeds.—Non-resident House Surgeon for twelve months. Salary £90 per annum.

KNIGHTON UNION.—Medical Officer and Public Vaccinator for the Llanbister District. Salary £80 per annum, with the usual extra medical fees.—Apply to the Clerk, Knighton, Radnorshire.

NORTHAMPTON GENERAL INFIRMARY.—Assistant to the House Surgeon for six months. Board, lodging, and washing provided and an honorarium of £25 given.

ROTHERHAM HOSPITAL AND DISPENSARY.—House Surgeon for three years. Salary 100 guineas, with rooms, commons, and washing. Also Assistant House Surgeon. Salary £30 per annum, with rooms and washing.

ROXBURGH DISTRICT ASYLUM.—Assistant Medical Officer. Salary £100 per annum, with furnished quarters, board, washing, and attendance.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London.—House Physician for six months. Salary at the rate of £40 per annum, with board, lodging, and washing.

ROYAL INFIRMARY, Sheffield.—Junior Assistant House Surgeon. Salary £50 per annum, with board, lodging, and washing.

SCARBOROUGH HOSPITAL AND DISPENSARY.—Senior and Junior Resident House Surgeons. The Senior for 12 months at a salary of £80 per annum, with board and lodging, and the Junior for six months, at a salary at the rate of £50 per annum, with board and lodging.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—Assistant House Surgeon. Salary £30 per annum, with board, lodging, and washing.

STAMFORD, RUTLAND, AND GENERAL INFIRMARY, Stamford.—House Surgeon for two years, unmarried. Salary £100 per annum, with board, lodging, and washing.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY.—Junior Resident Medical Officer. Salary for the first three months at the rate of £50 per annum and afterwards at the rate of £75 per annum, with board and residence in each case. Applications to the Senior Resident Medical Officer, 189, High-street, Stoke Newington, N.

STOCKPORT INFIRMARY.—Assistant House and Visiting Surgeon. Salary £70 per annum, with board, washing, and residence. Also Junior Assistant House Surgeon. Salary £2 per mensem, with board, washing, and residence.

VICTORIA HOSPITAL, Folkestone.—House Surgeon. Salary £80 per annum, rising to £100, with board, residence, and washing.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Resident Obstetric Assistant for six months. Board and lodging in the Hospital provided.

WREXHAM INFIRMARY.—House Surgeon. Salary £80, with board, washing, and furnished apartments.

# Births, Marriages, and Deaths.

## BIRTHS.

COOK.—On March 29th, at Newport-road, Cardiff, the wife of Herbert G. Cook, M.D., F.R.C.S., of a daughter (stillborn).

HAVELOCK.—On March 28th, at Sunnyside, Montrose, the wife of John G. Havelock, M.D., of a daughter.

INGRAM-JOHNSON.—On March 28th, at South Moor, near Chester-le-Street, the wife of R. E. Ingram-Johnson, L.R.C.P. Edin., L.R.C.S. Edin., &c., of twins (son and daughter).

LACE.—On March 27th, at The Paragon, Bath, the wife of Frederick Lace, F.R.C.S., of a son.

ST. LEGER.—On March 28th, at Westbury, Purley, Surrey, the wife of Robert A. St. Leger, M.B., of a daughter.

## MARRIAGE.

ABBOT-ANDERSON—SHAW.—On March 29th, at St. John's Church, Notting-hill, William Maurice Abbot-Anderson, M.B., B.S., of Wimpole-street, W., to Maude, widow of the late James Robert Shaw of Leeds.

CARDALE—DIBBEN.—On March 25th, at the Catholic Apostolic Church, Chelsea, Henry Jasper Cardale, M.B., C.M., eldest son of Vice-Admiral C. S. Cardale of Penlee-gardens, Stoke, Devonport, to Bruce, third daughter of Joseph Shephard Dibben of Toller, Dorset.

WHYTE—GRAY.—At the Parish Church, Dalkeith, on March 30th, by the Rev. Andrew Gray, D.D., father of the bride, assisted by the Very Rev. W. H. Gray, D.D., uncle of the bride, and the Rev. W. H. Gray, B.D., Minister of Aberdour, brother of the bride, James Curtis Whyte, M.D., The Elms, Eskbank, to Mary, only daughter of Dr. Gray, Minister of Dalkeith. At home May 3rd, 4th, and 5th.

## DEATHS.

DUNCAN.—On April 5th, at 8, Henrietta-street, Covent Garden, James Andrew Duncan, M.B. Lond., in his 80th year.

HAWKINS.—On March 31st, at 3, Northernhay-place, Exeter, Thomas Hawkins, M.R.C.S., aged 68.

JACKSON.—On March 28th, at 9, Evelyn-terrace, Brighton, the residence of her youngest son, Frances, daughter of the late James Swettenham of Wirksworth, and widow of the late Henry Jackson, surgeon, of Sheffield, aged 93.

SQUIRE.—On April 2nd, at Danescombe, Ealing-common, William Squire, M.D., F.R.C.P., aged 73 years.

TOMKYNS.—On March 24th, at Green Bank, West-hill, St. Leonards, William Fancourt Tomkyns, M.R.C.S., aged 74.

WALLICH.—On March 31st, at Nottingham-place, London, Surgeon-Major George Charles Wallich, M.D., Retired List H.M.I.A., in his 84th year.

***N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.***

## METEOROLOGICAL READINGS.

*(Taken daily at 8.30 a.m. by Steward's Instruments.)*

THE LANCET Office, April 6th, 1899.

| Date. | Barometer reduced to Sea Level and 32° F. | Direction of Wind. | Rainfall. | Solar Radia in Vacuo. | Maximum Temp. Shade. | Min. Temp | Wet Bulb. | Dry Bulb. | Remarks at 8.30 A.M. |
|---|---|---|---|---|---|---|---|---|---|
| Mar. 31 | 30·25 | S.E. | 0·17 | 89 | 62 | 45 | 48 | 48 | Raining |
| April 1 | 30·10 | S.W. | ... | 91 | 66 | 46 | 51 | 53 | Overcast |
| " 2 | 30·09 | S.W. | .. | 79 | 59 | 50 | 50 | 51 | Overcast |
| " 3 | 30·05 | W. | 0·02 | 86 | 61 | 49 | 49 | 51 | Overcast |
| " 4 | 30·11 | S.W. | .. | 81 | 60 | 48 | 49 | 51 | Cloudy |
| " 5 | 30·19 | W. | 0·05 | 101 | 62 | 45 | 46 | 50 | Fine |
| " 6 | 30·06 | W. | 0·05 | 101 | 63 | 50 | 51 | 54 | Cloudy |

# Medical Diary for the ensuing Week.

## OPERATIONS.

### METROPOLITAN HOSPITALS.

**MONDAY (10th).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

**TUESDAY (11th).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

**WEDNESDAY (12th).**—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.).

**THURSDAY (13th).**—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.).

**FRIDAY (14th).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

**SATURDAY (15th).**—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

## SOCIETIES.

**MONDAY (10th).**—MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. G. R. Herman: Case of Recurrent Cancer of Breast cured by Oöphorectomy and Thyroid Extract.—Dr. F. R. Walters and Mr. L. A. Bidwell: Cases of Lupus Erythematosus. Cases will also be shown by Dr. Calvert, Mr. Battle, and others.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square).—7 P.M. Council Meeting. 8 P.M. Discussion on Dr. W. Hunter's paper on the Relation of Dental Diseases to General Diseases. Papers:—Mr. C. S. Tomes: A Remarkable Diseased Tooth.—Mr. C. B. Keetley: Limitation of the Gape after Operations on the Cheek and Jaws.

**TUESDAY (11th).**—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Papers:—Mr. G. H. Makins: On Prevesical Hernia with the Relation of a Case in which Subacute Strangulation occurred.—Dr. A. G. Phear: The Clinical Examination of the Hæmic Leucocytes.

**WEDNESDAY (12th).**—DERMATOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—5.15 P.M. Demonstration of Clinical Cases.

HUNTERIAN SOCIETY.—8.30 P.M. Clinical Evening. Cases will be shown by Dr. F. J. Smith, Dr. D. Ross, Dr. Herman, and other Fellows.

**THURSDAY (13th).**—BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Discussion on the Abdominal Causes of Death after Cœliotomy (introduced by Dr. W. J. Smyly of Dublin).

**FRIDAY (14th).**—EPIDEMIOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—8 P.M. Council Meeting. 8.30 P.M. Ordinary Meeting.

CLINICAL SOCIETY OF LONDON (20, Hanover-square W.).—8.30 P.M. Papers:—Mr. W. G. Spencer: Wound of a large superficial Inguinal Artery in which the Blood was flowing from the Trunk to the Thigh.—Dr. Rolleston and Dr. C. Ogle: Syphilitic Stenosis of the Bronchi.—Mr. C. Lucas: Two Cases of Ununited Fracture of the Humerus caused by the Interposition of the Muscular Spiral Nerve between the Fragments.—Dr. S. West: The Skin Affections in Renal Disease.

## LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

**TUESDAY (11th).**—ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. J. C. Ewart: Zebras and Zebra Hybrids.

**WEDNESDAY (12th).**—THE SANITARY INSTITUTE, (Parkes Museum, Margaret-street, W.).—8 P.M. Discussion on Practical Hygiene Teaching in Elementary Schools (opened by Miss Alice Ravenhill).

NORTHERN AND MIDLAND DIVISION OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION (County Asylum, Hatton, Warwick).—4 P.M. Spring Meeting. Discussion on the Nursing Staff in Public Asylums (opened by Dr. Macphail). Paper:—Dr. Wilcox: Some Cases of Insanity treated by various Animal Extracts.

**THURSDAY (13th).**—ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Dewar: The Atmosphere.

# Notes, Short Comments, and Answers to Correspondents.

## EDITORIAL NOTICES.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

*It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.*

*Lectures, original articles, and reports should be written on one side of the paper only,* AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

*Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.*

*We cannot prescribe or recommend practitioners.*

*Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."*

*Letters relating to the publication, sale, and advertising departments of* THE LANCET *should be addressed "To the Manager."*

*We cannot undertake to return MSS. not used.*

## MANAGER'S NOTICES.

### THE INDEX TO THE LANCET.

THE Index to Vol. II. of 1898, which was completed with the issue of Dec. 31st, and the Title-page to the Volume, were given in THE LANCET of Jan. 7th.

### VOLUMES AND CASES.

VOLUMES for the second half of the year 1898 are now ready. Bound in cloth, gilt lettered, price 1*s.*, carriage extra.

Cases for binding the half-year's numbers are also ready. Cloth, gilt lettered, price 2*s.*, by post 2*s.* 3*d.*

To be obtained on application to the Manager, accompanied by remittance.

### TO SUBSCRIBERS.

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

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## AUDACIOUS QUACKERY.

WE read in the *Abergavenny Chronicle and Monmouthshire Advertiser* an account of an inquest held recently at the Abergavenny Asylum which presents points of interest. The name of the deceased was George Pearce, aged 34 years, of Yew Tree Cottage, Newbridge, who had been admitted four days previously to the asylum.

The evidence of Dr. James Glendinning was to the effect that the deceased was, at the time of his admission, in a very feeble and exhausted condition. He was depressed and very unwilling to speak in reply to questions, although he was able to do so. There were marks of burning on his lips, chin, and neck. With difficulty he was got to take some milk. He was put to bed at once but was very restless. On the following day he took milk and beef-tea, but remained very reticent and restless, so much so that it was difficult to keep the bed-clothes on him. On the third day he changed suddenly for the worse and died at 8.50 A.M. on the following morning. A post-mortem examination was made when the brain was found to be the seat of organic disease.

The next witness was one William Allen, a colliery labourer, who "had been an army hospital orderly." He said that he had known deceased for seven years, had worked in the same pit with him, and "had attended him since Christmas," the attendance, as he explained, comprising visits five or six times a day and the administration, "as he had done to hundreds of others," of medicines and lotions. A policeman proved finding among the medicines prepared by Allen for the use of the deceased a bottle labeled "Nitric Acid, Poison," with the contents of which Pearce had apparently committed suicide. This witness gave evidence that Allen's attendance upon the deceased was assiduous and that when Pearce was suffering apparently from mineral poisoning he administered "milk and mustard to wash the poison out of him." Mr. W. H. Clark and Mr. James Wild both gave evidence that on being summoned to see Pearce he was obviously suffering from corrosive poisoning and was also in a condition of extreme mental despondency, so that for his own sake and that of others it was necessary to send him to the Abergavenny Asylum.

The coroner in summing up referred, according to the *Abergavenny Chronicle and Monmouthshire Advertiser*, to the witness, William Allen, as "a mass of gross ignorance, presumption, and self-conceit," and expressed his regret that he could not clearly see his way to direct the jury to charge him with manslaughter. The jury delivered the following verdict: "The deceased committed suicide by taking poison—viz., nitric acid—whilst temporarily of unsound mind and the jury fully concur in the strongest censure of the conduct throughout the matter of the witness, William Allen."

We have narrated this typical but not very unusual case of quackery at some length—firstly, because the miserable death of the victim gives it a lurid importance, and secondly because from all accounts the prevalence of the audacious charlatan in mines and coaling pits is becoming little short of a public scandal. It is hard to think that no proceedings can be taken against the man Allen who openly alleges that he has only done in the case of Pearce what he has done in hundreds of other instances. The coroner was, of course, quite correct in his view that no charge of manslaughter could be brought against him on this occasion, but his opportunities for enacting similar tragedies in the future should be made more limited. Is it not possible that the overseers and foremen should keep an eye upon the workmen who are more or less committed to their care and should make some attempt to enlighten them upon the suicidal folly of trusting to the voice of the bone-setter and the "miraculous curer"? The miners' hours are watched over by more or less interested politicians and his wages are subject matter for the energies of the philanthropist and the agitator; there is quite room for an occasional propagandist to preach to him the doctrines of good sense in respect of his health.

We make the suggestion but without much hope of its bearing fruit, for in our experience the foreman is as likely to be the votary of the quack as any of the men under his charge. And in this connexion the following letter which we have received for publication from a correspondent makes interesting reading:—

J. BLACKBOURN,
Bonesetter to the Grimsby Fishermen's Association, Fishermen's and Sailors' Union, General Workers Union, also to the Railway Company.
X Rays used if desired.

MOSS BANK, CLEETHORPE-ROAD, GRIMSBY.
MR. ——. March 20th, 1899.

DEAR SIR,—In my opinion i dont think your Arm will ever be right again. as regards the varicose vains of the arm, the rupture of Flesh and guiders in time will be right, in my opinion you will have to wear a Armlett always. Yours truly,
J. BLACKBOURN.

The medical practitioner who sent us the above letter writes in explanation of it: "The patient had a bit of timber fall across his arm which has done him no injury whatsoever. When he came to me he had his forearm bandaged and two straps of adhesive plaster round the arm. When I removed them the incurable varicose 'vains' immediately disappeared. I told him that 'a Armlett' was not necessary. The information in the top left-hand corner I believe to be correct and I should think it places the medical gentlemen who are connected with these societies in a very dangerous position, likely at any time to bring them within the purview of the General Medical Council. I could excuse the ignorant fishermen's associations, but what is to be thought of the railway company giving a *locus standi* to quackery in this manner?" What, indeed? Well, only that the health of their employés is apparently a matter of no moment to the company or they would prevent Mr. J. Blackbourn from announcing himself as their bonesetter even if they did not go so far as to point out to the men that the ministrations of audacious quackery always mean disaster.

## A QUESTION OF PENSION.

A WORKHOUSE medical officer holding two appointments as such resigned one three months after the other. Can he claim superannuation allowances only from the date of resignation of the last of the two appointments or can he claim the extra three months on the one appointment?

*** The information given by our correspondent is not sufficient to form a definite opinion upon. If the workhouses referred to are situated in one and the same union the superannuation allowance will date from the day of resignation of the second or last appointment and is calculated upon the average emoluments of the past five years. On the other hand, if the workhouses are in different unions separate superannuation allowances will be granted dating from the day of resignation in each case. As a general rule, if a workhouse medical officer holding two appointments under the Poor-law vacates one three months after the other the difference is so small as to be hardly worth consideration, but the amount of superannuation generally dates from the later resignation.—ED. L.

## "THE USE OF MIDWIFERY FORCEPS."

*To the Editors of* THE LANCET.

SIRS,—It is a pity to see one practitioner come forward and openly accuse others of "clapping on forceps" and for the sake of the expenditure of an extra hour sacrificing the perineum. This gentleman asks "if so doing is justifiable" or if the doer "has the future good and safety of his patient at heart." I deny altogether that there is any man in the profession who does such a thing. It is to every practitioner's own interests that the perineum should be saved from rupture. To talk of medical men losing sight of the welfare of their patients for the sake of saving time is a gross insult. I cannot imagine a medical man applying forceps and at the same time admitting to his inward conscience that there is a chance of injury arising from his interference which outbalances the advantage. Men who will do such things are of the black sheep which are found in every flock, but are to be reckoned as outside. If any discussion on the use of the forceps is required it is to my mind not how long can we safely delay, but how to come to an early decision. In protracted labour a time will come when those about the patient can see the necessity for interference as well as the medical attendant. It only too frequently happens that the medical man allows that time to arrive because until then he is sure to be met with opposition on the part of the relatives, if not of the patient as well. There can be no better axiom than that by Playfair—"When we are convinced that natural efforts are failing and are unlikely to effect delivery except at the cost of a long delay, it is better to interfere soon rather than late." In my own practice I use the forceps on an average at every sixth labour I attend. To their early use I attribute the fact that out of some hundreds of cases I have not lost one. Moreover, I have seen no ill effects from their use, not from any particular skill in their use, but simply from the fact that I have used them as soon as the necessity became apparent and not waited till it became evident. When so much that is unnatural and artificial enters into the daily life Nature should not be left to her own resources to the last minute. How can she thereafter be expected when in an exhausted condition to undertake the process of repair?

I am, Sirs, yours faithfully,
Hirst, Morpeth, March 27th, 1899. A. T. SIMPSON.

## "A RIGHTEOUS MAN REGARDETH THE LIFE OF HIS BEAST."

*he Editors of* THE LANCET.

SIRS,—It may interest your readers to know that the therapeutic effects of Christian Science can be used for the benefit of the lower animals as well as man. In a recent conversation with a prominent light of that community she related a case in which a valuable race-horse "went sick," and after five veterinary surgeons had failed a lady Christian Scientist was called in with the usual happy results. I naturally asked what was the sin which the horse had committed (for "disease is the result of sin") and I was told that it was its master's sin that made it ill. The lady had brought Christian Science to bear on the master and the horse got well and won him 6000 dollars. This vicarious suffering seems to throw fresh light on the text "A righteous man regardeth the life of his beast." I am, Sirs, yours faithfully,
Harley-street, W., March 27th, 1899. WM. RUSHTON.

## A POINT IN MEDICAL ETHICS.

*To the Editors of* THE LANCET.

SIRS,—May I ask your opinion in the following case? A has been the local medical attendant of the family of X for over seven years, during which time X has also consulted B. Recently the wife of X, without the knowledge of A, consulted B who advised an immediate operation. On the day preceding the operation X called upon A to know if B had called or written respecting it, as he had left all the necessary arrangements in the hands of B. To the surprise an

annoyance of X, A had received neither verbal nor written communication and his only reply was that he would be in readiness to do whatever was required of him, but that he could do nothing till he had heard from B. The following day B brought assistants with him and operated without holding any communication with A? Now, has B done rightly by A? In order to better understand the situation X lives next door to A and B lives in the adjacent town six miles off. B is the president of the medical society and on the consulting staff of the hospital of that town and is a Doctor of the University of London, and his assistants at this operation were the one a neighbour to B and the other a neighbour to A. At a time when medical morals and good manners are claiming greater prominence in our professional life and when men look to high places for guidance it would be instructive to learn whether in your editorial judgment B set an honourable and justifiable example in ignoring A who has consulted with and assisted him in the same household before and if A acted wisely in not thrusting himself forward, uninvited, without knowing time and circumstance?

I am, Sirs, yours faithfully,

April 4th, 1899. D.P.H.

*** There can be but one opinion upon the situation as set forth by our correspondent. A acted perfectly rightly and B perfectly wrongly.—ED. L.

## A MEDICAL SPECIALIST.

*To the Editors of* THE LANCET.

SIRS,—A certain individual of the name of Mackenzie has temporarily established himself here and exhibits a plate in a shop window where he lodges, describing himself as "Medical Specialist." He is obtaining, according to information I receive, fees even up to two guineas. Is he within his legal rights in exhibiting a plate with the description "Medical Specialist" on it?—I am, Sirs, yours faithfully,

March 31st, 1899. ENQUIRER.

*** It is not possible to be certain whether a particular bench of magistrates would consider the Medical Act to be contravened by such a plate. To our thinking the person is clearly pretending to be a medical man and should be fined.—ED. L.

## THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H. KINGSLEY HUNTER, L.S.A.

*To the Editors of* THE LANCET.

SIRS,—Dr. A. G. Bateman, Secretary of the Medical Defence Union, has joined the Hunter Fund Committee. I shall be much obliged if you will acknowledge in your columns the following subscriptions:—

| | £ | s. | d. | | £ | s. | d. |
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| Dr. W. Domett Stone ... | 1 | 1 | 0 | Mr. Richard Holton ... | 1 | 0 | 0 |
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| Dr. D. M. King... ... ... | 1 | 1 | 0 | Mr. Charles Turner Standring ... ... ... | 0 | 5 | 0 |
| Dr. R. A. Fryer... ... ... | 0 | 10 | 6 | | | | |

I am, Sirs, yours faithfully,

RIVERS WILLSON, Treasurer.

42, Wellington-square, Oxford, April 5th, 1899.

## THE EMPLOYMENT OF UNQUALIFIED ASSISTANTS.

*To the Editors of* THE LANCET.

SIRS,—A medical practitioner in the town in which I live has a son at college (a second year's man). (1) Is this student allowed to visit, prescribe, and attend midwifery cases? He also visits and prescribes for the parish patients, his father being the medical officer for the workhouse. (2) If this is allowed by the General Medical Council, should I not be allowed to employ an unqualified assistant? (3) If I give information to the Council must I attend to prosecute or prove the case? What steps should I take, if any, in the matter?

I am, Sirs, yours faithfully,

April 3rd, 1899. X. Y. Z.

*** The wording of the decision of the General Medical Council upon the employment of unqualified assistants is not absolutely clear. We recommend our correspondent to consult THE LANCET of Nov. 27th, 1897, and to read the report of the proceedings of the General Medical Council and the first leading article. 1. The son can only act as a *bond-fide* pupil. 2. "X. Y. Z." must not wrongfully employ an unqualified assistant because he believes that another practitioner is so doing. 3. The Medical Defence Union, 4, Trafalgar-square, or the London and Counties Medical Protection Association might be informed of the matter and might be willing to introduce it to the notice of the General Medical Council.—ED. L.

## FRAUDS ON THE POOR.

AN inquest was held on March 29th by Mr. Braxton Hicks who said that he wished to take that opportunity of exposing a gross fraud upon the poor. Recently he had held an inquest upon the body of a girl who was burnt to death. The father stated that she suffered from epilepsy and he had been attracted by an advertisement headed "I cure fits." He therefore purchased a bottle of medicine called "Elepizone" prepared by H. G. Root, 28, Endsleigh-gardens, Euston-road, N.W. The price of the bottle was 7*s.* Mr. Womack of St. Bartholomew's Hospital had analysed the contents of the bottle and had found it to contain three grains of potassium bromide to the drachm, together with a little colouring matter. The value of the contents was about 2*d.* We suppose from this that it was a 16 oz. bottle which would contain at three grains to the drachm 384 grains of bromide. Pure potassium bromide costs 3*s.* per lb., therefore 388 grains would cost 2*d.* The coroner stigmatised this as nothing less than a fraud upon the poor and we quite agree with him. We commend this case to the notice of Mr. Walter Long. All such articles should be labeled in large letters with the nature of the contents and the quantity thereof. Then if people like to pay 7*s.* for what is worth at the outside 6*d.* including the bottle, cork, and wrapping, they may do so. But, to quote Mr. Long, the public should always know what they are buying.

## "MORE DANGEROUS THAN INFLUENZA."

WE quote the following admirable remarks from the *Newcastle Journal* of March 30th, where they appeared above the signature "Whist":—

> There is a disorder about that is linked to influenza, but is incomparably more dangerous than influenza, and the doctors are as helpless against it as I am. It is a disease of the mind, with as many physical distempers in its train as would fill Pandora's box. It is the vulgar, stupid, and inexplicable credulity which induces a man, believing he has caught influenza, to take the advice of anybody about a cure. There are as many nostrums and catholicons about for influenza as would poison all the beasts of the Sunderbunds, making even the muggers of the deeps there vomit. In railway trains and tramcars, in the street and in the market, in the drawing-room and in the public-house, you may meet them every day who have their remedy at hand—a remedy that cured some acquaintance of theirs straightaway for a certainty. It may be anything from treacle and sulphur upwards. No matter: it is sworn to as a cure. Believe me, these amateur quacks are more dangerous eople than the professional quacks, because they get at you in the name of friendship and in their ignorance sincerely believe what they tell. Believe me further that they cannot tell what ails you nor what will cure you and that the treatment good for one patient might be bad for another. There is but one course for a sensible person to follow when ailing—that is, to go straight to a qualified medical man and follow his directions to the letter.

## MEDICAL PRACTICE IN MASHONALAND.

*To the Editors of* THE LANCET.

SIRS,—Can any of your readers give me information as to the prospects of a medical man settling in Mashonaland?

I am, Sirs, yours faithfully,

April 5th, 1899. ARTEGALL.

*A.*—We subscribe to the general and well accepted rule that the intimate relation is not, to quote our correspondent's words, "the most suitable medical attendant in any case at all productive of anxiety." But the particular case put to us has its peculiarities. We think the patient and her parents should give their opinion and that the medical men should promise to waive their personal feelings and abide by it.

*Viator.*—There is no scale for the guidance of our correspondent, and in the absence of all particulars of the nature and gravity of the case we do not feel able to give him more than general advice. He should take into consideration the importance of the case, and the value of his time and of his evidence on behalf of his patient.

*Important.*—The coroner passed no strictures whatever on the hospital. Our correspondent would seem to have been much beholden to hospitals himself; why, therefore, bite the hand that has fed him?

*J. F. T.*—The address of the firm in question is N.A.P. Window Co., Ltd., 159, Victoria-street, S.W. The dangers of window cleaning have often been referred to in our columns.

*Workhouse M.O.*—The authority for the statements in our annotatio was the Lunacy Acts. The matter was dealt with in THE LANCET of Feb. 11th, 1899.

*U. G. D.*—The point has been mooted in our columns and elsewhere. It should soon receive an answer based upon statistical experience.

*Mr. A. C. Roper.*—We have already favourably noticed the saddle in question in our issue of Oct. 2nd, 1897.

**During the week marked copies of the following newspapers have been received:** *Slough Observer, Portsmouth Times, London Morning, Bath Herald, Stockport Chronicle, Cromer and North Walsham Post, Birmingham Daily Post, Manchester Courier, Scotsman, Times of India, Pioneer Mail, Sheffield Daily Telegraph, Sun, Manchester Guardian, Hampshire Post, Citizen, Architect, Builder, South Wales Daily News, Ayrshire Post, Surrey Comet, Middlesex Chronicle, Isle of Wight Express, Yorkshire Post, Chatham Observer, East Essex and Halstead Times, Launceston Post, Surrey Advertiser, Market Rasen Mail, Faversham News, Ilfracombe Gazette, Liverpoo Daily Post, West Kent Advertiser, Lichfield Mercury, Midland Herald, Freeman's Exmouth Journal, Bristol Mercury, Sleaford Gazette, Isle of Man Times, Leeds Mercury, Rugby Times, Skipton Herald, Brighton Argus, Sanitary Record, Christian World, Mining Journal, Local Government Journal, Brighton Gazette, Windsor Chronicle, Australasian Medical Gazette, Local Government Chronicle, Nottingham Daily Express, City Press, Reading Mercury, Christian Recorder (Philadelphia), Public Health Engineer, The Star (Johannesburg), Ayrshire Post, Daily Chronicle, Eckington, Woodhouse, and Staveley Express, &c., &c.*

## Communications, Letters, &c., have been received from—

A.—Mr. F. Algar, Lond.; Mons. J. Astier, Paris; Autotype Co., Lond.; Aston Union, Clerk of; Messrs. Armour and Co., Lond.; Messrs. Arnold and Co., Lond.; Mr. C. Adams, Milford-on-Sea; Alpha, Sheffield; Anderson's College Medical School, Glasgow; Mr. Clarence Andrews, Lond.

B.—Mr. C. Birchall, Liverpool; Mr. F. D. Bush, Row; Messrs. J. Beal and Son, Brighton; Dr. J. M. Barbour, Lond.; Blackburn and East Lancashire Infirmary, Secretary of; Mr. G. de V. Belson, Guildford; *Birmingham Daily Post*; *British Dental Journal*, Manager of; *Bath Herald*, Proprietor of; Birmingham General Hospital, House Governor of.

C.—Mr. W. J. Chamberlain, Lond.; Messrs. J. Crosfield and Sons, Warrington; Messrs. Crossley, Moir, and Co., Lond.; Messrs. Clarke, Son, and Platt, Lond.; *Chronicle* Office, Bath; Mr. K. L. Chatterjee, Mal. India; Clinical Society of Ipswich, Hon. Secretary of; Dr. W. J. Collins, Lond.; Dr. N. Cullinan, Pontymister; Messrs. Cassell and Co., Lond.; Mr. W. F. Clay, Edinburgh.

D.—Mr. W. H. Dolamore, Lond.; Messrs. Duncan, Flockhart, and Co., Edinburgh; Mr. W. W. Davies, Bristol; Dr. C. Douglas, Glasgow; Mr. Frederick Deane, Barbados; Driffield Union, Clerk of.

E.—Mr. A. Eddowes, Loughborough; Examination Hall, Lond., Secretary of; E. H. M.

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